```
GAGAAAGAGACATTCACTTGGAGGCTCTTGCTGAAAATGGGTTTAACTCTCTTTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACACCACCATTACATCATCGTGGCAAATTAAAGAAGGAGGGGGAAAAAGGAGGCTTATTG
                                                                                                                                                                                                              RESULT 1
US-09-816-494-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    437
                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 2877, Ap
Sequence 31, Appli
Sequence 31, Appli
Sequence 3684, Ap
Sequence 1, Appli
Sequence 4617, Ap
Sequence 347, Appli
Sequence 1135, Ap
Sequence 1135, Ap
Sequence 2615, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                App
App
App
App
App
App
App
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            App
App
                                                      2; Search time 529 Seconds
(without alignments)
10306.378 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 1, Appli
Sequence 3, Appli
                                                                                                                                                                                                                                                                                                                                                     Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                          Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence Sequence Sequence S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                  1 gagagaaggagaagataata.....ataaagatgaacttggtttc
                                                                                                                                                                                                                                                                         Issued Patents NA:*

(cgn2_6/ptodata/1/ina/5A_COMB.seq:*

(cgn2_6/ptodata/1/ina/5B_COMB.seq:*

(cgn2_6/ptodata/1/ina/6A_COMB.seq:*

(cgn2_6/ptodata/1/ina/6B_COMB.seq:*

(cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*

(cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
5.1.6
Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-816-494-1
US-09-13-996-287
US-09-13-996-287
US-09-13-996-287
US-09-13-996-287
US-09-920-68-3
US-09-949-016-3250
US-09-949-016-4617
US-09-557-921-1
US-09-949-016-4617
US-09-949-016-4617
US-09-949-016-4617
US-09-022-146-3
US-09-022-146-3
US-09-023-655-347
US-09-021-444-1135
US-09-016-441-1135
US-09-016-441-1499
US-09-016-441-1499
US-09-016-441-148-801
US-09-016-441-148-801
US-09-016-48-801
US-09-016-457-801
US-09-016-457-801
US-09-016-457-801
US-09-016-457-801
US-09-016-457-801
US-09-016-457-801
US-09-016-457-801
                                                                                                                                                                                    Total number of hits satisfying chosen parameters:
                                                                                                                                                                1202784 segs, 818138359 residues
                                                                                                                                                                                                                                                                                                                                                                                             SUMMARIES
GenCore version (c) 1993 - 2005
                                                         00:42:12
                                                                                                                                                                                                                                    Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                     sw model
                                                                                                                                    IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                         1, 2005,
                                     using
                                                                                                                                                                                                         seq length: 0
seq length: 200000000
                                                                                           US-09-964-277-20
3332
                                                                                                                                                                                                                                                                                                                                                                                                                           DB
                                                                                                                                                                                                                                                                                                                                                                                                                                             Query
Match Length
                                     nucleic search,
         Copyright
                                                          September
                                                                                                                                                                                                                                                                                                                  5 5 .. ..
                                                                                                                                                                                                                                                                                                                                                                                                                                              Title:
Perfect score:
                                                                                                                                    Scoring table:
                                                                                                                                                                                                         Minimum DB
Maximum DB
                                     nucleic
                                                                                                                   Sequence:
                                                                                                                                                                   Searched:
                                                                                                                                                                                                                                                                             Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                  Result
No.
```

U

```
2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      403
197 GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGGAAAGCAAAGAATGATGTAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   224 GCTTTCAGTCCAGTGTAAAGCTGTTGAAGGCGGGGAGCAAAGGTAAAGAATGATGTAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      284 CGCTGCTCCAAAGCATCTTTTGTTGTGGAATGGTTATTCCAGTCATCTTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATCAAATGTGAGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              257 CGCTGGCTCCAAAGCATCTTTTGTTGTGGAATGGTTATTCCAGTCATCTTTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                            803,
803,
803,
803,
8025,
8025,
8026,
8026,
                                                                                                                       Sequence
Sequence
Sequence
Sequence
Sequence
                          Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     165;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 4; Length 3544;
                                                                                                                                                                                                                                                                            DUAL SPECIFICITY
AND USES THEREFOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
      US-08-530-201-11
US-09-702-705-803
US-09-702-705-803
US-09-614-124B-803
US-09-61-325-803
US-09-61-325-803
US-09-68-814-803
US-09-702-705-825
US-09-71-325-825
US-09-671-325-825
US-09-671-325-825
US-09-671-325-825
US-09-671-325-825
US-09-671-325-825
US-09-68-88-84-825
US-09-671-325-826
US-09-702-705-826
US-09-702-705-826
US-09-702-705-826
US-09-702-705-826
US-09-702-705-826
US-09-702-705-826
US-09-671-325-826
US-09-671-325-826
                                                                                                                                                                                                                                   Sequence 1, Application US/09816494
; Sequence 1, Application US/09816494
; Patent No. 6664089
; GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: 38692 AND 21117, NOVEL DUARTILE OF INVENTION: 98692 AND 21117, NOVEL DUARTILE REFERENCE: 10448-03002
CURRENT APPLICATION NUMBER: US 60/191,858
; PRIOR APPLICATION NUMBER: US 60/191,858
; RIOR FILING DATE: 2000-03-24
; NUMBER OF SEQ ID NOS: 10
; SEQ ID NO 1
; LENGTH 3544
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 2950; DE
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                       ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 95.0%;
Matches 3135; Conservative
US-09-816-494-1
                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
ORGANISM: Homo sapiens
```

436 463 496

556 523

1473 GEGTICCCCAGGTGCCCAGCTGCACCTTARAGGACACCACCTTAGACACACTTACACCTT
8 4 8 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
S1

1117 1177 1237 1417 1020 ALCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAATTTTG 1057 1297 1357 999 720 780 840 900 960 360 420 900 926 ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC 480 937 540 997 621 681 120 741 180 801 240 861 300 921 9 GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG 541 CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAGTACCTGTCCAAAGCCTGACTTTT 661 CCGTGGTTGGACAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC 298 CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT CAGCAGAATGGGATTGGTTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT 562 ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA 1 ATGGCCCATGAGATGGTTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA CACATITITGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG Gaps Indels 164; Length . 0 4., 四 Score 1660; DE Pred. No. 0; 0; Mismatches Query Match
Best Local Similarity 91.8%;
Matches 1834; Conservative CITGC 1238 1358 1118 1058 721 901 622 61 121 922 361 927 421 481 966 682 742 802 241 862 301 927 g g ద g 셤 셤 셤 ò ò ò Š g g 셤 ਨੇ 셤 Š 셤 Š ద ð 엄 8 g ò g ઠે ò 8 à g ò 8

δ 셤 8 qq ò g ò ద ò g õ g ò g ò 셤 ò 셤 ò

```
1 ACTGAGAGGTTGGTGGTY--KCTGGAAAGTGGAACGGNAAAAAGTGCTGCTAATTGATAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    654 CCGGCCATTIGIGGAAIA-CAAIACAICCCACAITITGGAAGCCATIAAIAICAACIGCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         59 CCGGCCATTTGTGGAATACCAATACATCCCACATTTTGGAAGCCATTAATATATCAACTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCAAGCTTATGAAGCGAAGGTTGCAACAGGACAAAGTGTTAATTACAGAGCTCATCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 773 ATTCAGCGAAACATAAGGTTGACATTGATTGCAGTCAGAAGGTTGTAGTTTACGATCAAA
         APPLICANT: Duclert, A. TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins. TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins. Patter OF 183961

PALENT NO. 6783961

PRICE APPLICATION NUMBER: US/09/513,999C

CURRENT APPLICATION NUMBER: US 60/122,487

PRIOR PAPLICATION NUMBER: US 60/122,487

PRIOR PILING DATE: 1999-02-26

NUMBER OF SEQ ID NOS: 36681

SOFTWARE PATENT. PM

SEQ ID NO 2877

LENGTH: 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              595 ACTGAGAGGTTGGTGGCTCTGGAAAGTGGAACGG-AAAAAGTGCTGCTAATTGATAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4 ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
8.8%; Score 294.6; DB 4; Length 333;
Best Local Similarity 97.3%; Pred. No. 2.1e-82;
Matches 326; Conservative 5; Mismatches 0; Indels 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCATION: 37
CTHER INFORMATION: Xaa=His or Gln US-09-513-999C-2877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ď
                                                                                                                                                                                                                                                                                                                                                                                                                                 or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                        TYPE: DNA
ORGANISM: Homo sapiens
FRATURE:
NAME/KEY: CDS
LOCATION: 127..333
FRATURE:
NAME/KEY: misc_feature
LOCATION: 17
OTHER INFORMATION: h=a or
                                                                                                                                                                                                                                                                                                                                                                                                                                   Olhes. __
FEATURE:
NAME/KEY: misc_feature
-~~TON: 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION: n=a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCATION: 58 _
OTHER INFORMATION: r=a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OTHER INFORMATION: Y=C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: misc_feature LOCATION: 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OTHER INFORMATION: k=g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: misc_feature
LOCATION: 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
NAME/KEY: misc_feature
LOCATION: 237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION: w=a FEATURE:
SENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: UNSURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1200
                                                                                                                                                                                                                         1657
                                                                                                                                                                                                                                                                                                 1717
                                                                                                                                                                                                                                                                                                                                  1320
                                                                                                                                                                                                                                                                                                                                                                         1777
                                                                                                                                                                                                                                                                                                                                                                                          1837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGAC 2317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2318 AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA 2377
TGTGCCGACTCTGCTACCTCAGAGGCAGCAGACAAAGGCCCGTGCATCCCGCCAGCGTG 1477
                 1021 TGTGCCGACTCTGCTACCTCAGAGGCAGGAGCAGAAGGCCCGTGCATCCCGCCAGGGTG
                                                                     AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTC
                                                                                                                                                                                                                                          1201 TCTCTGGATATCAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTC
                                                                                                                                                                                                                                                                                                                      1261 TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1441 AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGCAGGGCACCGCCCCAGAGGTCCTTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1621 TGGGATATCTTGGCCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1681 ACAGAGTCCTCACACTTCTACTCTGCCTCAGCGCATCTACGGAGGCAGTGCCAGTTACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2198 CAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCTTTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGTGGGGTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTC
                                                                                                                                                                                                                       TCTCTGGATATCAATTCATATTCAGCCAGCATGCCAGCATCCTTACATGGCTTC
                                                                                                                                                                                                                                                                                                 TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC
                                                                                                                                                                                                                                                                                                                                                                           AAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1501 TCTCCACTGCATCGAAGTGGGAGCGTGGACAAATTACCACACCAGCTTCCTTTTCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTTTCCACCAGCCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOGGATATCTTGGCCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATCATTGAGGTCTCCTGA 2395
                                                                                                                                                                                    1141
                                                                                                                                                                                                                       1598
                                                                                                                                                                                                                                                                                                                                                                         1718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1981
                                                                     1478
                                                                                                                                                                                                                                                                                                 1658
                                                                                                                                                                                                                                                                                                                                                                                                                                                1778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2378
1418
                                                                                                          1081
                                                                                                                                               1538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1921
```

g

g

ò

a

6 B 6

ð

q

8 8 8

셤

ò

ä,

712

58

832

298

S a

RESULT 3 US-09-513-999C-2877 ; Sequence 2877, Application US/09513999C ; Patent No. 6783961

d

```
Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 6.8%; Score 225.2; DB 4;
Best Local Similarity 60.6%; Pred. No. 9.9e-60;
Matches 418; Conservative 0; Mismatches 248;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1147 AGAGCGCTGCCACAGGGAATGCGGCTGCCAGGGAGGGCG-
                                                                                                                       Sequence 3, Application US/09920668 Patent No. 6482644
                                                                                                                                                                                                                                                                                                                                                                                             ; NAME/KEY: CDS
; LOCATION: (135)...(2012)
US-09-920-668-3
                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
ORGANISM: Homo sapiens
                      241 GCGAAAC 247
GCGAAAC 784
                                                                                                                                                                                                                                                                                                                        LENGTH: 2377
                                                                                                      US-09-920-668-3
778
                                                                                                                                                                                                                                                                                                       SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
 ଚ
                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTTATGAAGCGAAGGTTGCAACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCA 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAGAGGTTGGTGCTGCTGGAAAGTGGAAAGGGGAAAAAGTGCTGCTAATTGATAGCCGG 657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCATTTGTGGAATACAATACATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAG 717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITATGAAGCGAAGGTTGCAACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCA 777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 GGGAAAAGAGGACTTATTGTTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                   SIGNALING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Indels
                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER REDUM TYPE: Floppy disk
MEDIUM TYPE: Floppy disk
COMPUTER: Eloppy disk
COMPUTER: IBM PC COMPALIDLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2
CURRENT APPLICATION NUMBER: US/09/016,434
FILING DATE: HEREWITH
CLASSIFICATION NUMBER:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                           GENERAL INFORMATION:
APPLICANT: Janice Au-Young
APPLICANT: Janice Au-Young
APPLICANT: Jeffrey J. Seilhamer
TITLE OF INVENTION: COMPOSITION FOR THE DETECTION OF
TITLE OF INVENTION: PATHWAY GENE EXPRESSION
NUMBER OF SEQUENCES: 1490
CORRESPONDENCE ADDRESS:
ADDRESSES: INCYTE PHARMACEUTICALS, INC.
STREET: 3174 PORTER DRIVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 247; DB 4; I
Pred. No. 2.2e-67;
   927
                    299 TGGAGAAGAGCTTCAACTCTGTTCACCTGCTTGCA 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 7.4%; Score 247; DB Best Local Similarity 100.0%; Pred. No. 2.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Zeller, Karen J.
REGISTRATION NUMBER: 37,071
REFERENCE/DOCKET NUMBER: PA-0002 US
TELECOMMUNICATION INFORMATION:
TELEFAX: (650) 865-0555
TELEFAX: (650) 845-4166
INFORMATION FOR SEQ ID NO: 91:
SEQUENCE CHARACTERISTICS:
                                                                                                                           ; Sequence 91, Application US/09016434
; Patent No. 6500938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 279 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LUNGFET03
                                                                                                                                                                                                                                                                                                                            CITY: PALO ALTO STATE: CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                ZIP: 94304
                                                                                         RESULT 4
US-09-016-434-91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-016-434-91
                                                                                                                                                                                                                                                                                                                                                                 COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
   893
```

g 8

셤 δ g ò

```
GENERAL INFORMATION:
APPLICANT: Lex M. COMBERT
APPLICANT: Brett P. Monia
TITLE OF INVENTION: ANTISENSE MODULATION OF DUAL SPECIFIC PHOSPHATASE 8 EXPRESSION
FILE REFERENCE: RTS-0246
CURRENT APPLICATION NUMBER: US/09/920,668
CURRENT FILING DATE: 2001-08-01
NUMBER OF SEQ ID NOS: 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       987 AGCCTGACTTTATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTG 1046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1047 AGAAAATTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCA 1106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  970 gececcearcarciceaceaaciricaacirceresecaeciaeriseaeracaeaeaa 1029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1030 cécricada de contra contr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1347 AGAAGCCAAATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGAGCGCCC 1406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1087 Adecricececanteraceaceacacacacacacacacacacacacacacacaraceras 1146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1407 TCAGTCCACCCTGTGCCGACTCTGCTACCTCAGAGGCAGGAGAAAAGGCCCGTGCATC 1466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1467 CCGCCAGCGTGCCCAGCGTGCCCAGCGTGCAGCCGTCGTTAGAGGACAGCCCGCTGG 1526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1186 eccreadoceses es es estados estad
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1527 TACAGGGCTCAGTGGACTGCACCTGTCGCAGACAGGGTGGAAGAGAGCAGCAATAAGCTCA 1586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     910 ceracarcardaadaccardegecardrecerceaceaceceracadegreereaadada 969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         850 gcrieccaagicarcearciacriercrescriescarciccescricicaccarcearce
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         927 AGGAGCTGATGCAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               730 AGCCTGACTTCATCTGCGAGAGCCGCTTCATGCGGGTCCCCATCAACGACAACTACTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    190 AAAAACTGCTGCCTGGCTGGACAAGTCCATCGAGTTCATCGATAAAGCCAAGCTCTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               107 ATGGATGTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1227 AAAGACCTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1287 AGATTAAGAACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 2377;
```

g

용 ò

```
ö
                                                                                                                                                                                                                                                                                                                                                                       pertent No. 6783961
| GENERAL INFORMATION:
| APPLICANT: Dumas Milne Edwards, J.B. |
| APPLICANT: Dumas Milne Edwards, J.B. |
| APPLICANT: Dumas Milne Edwards, J.B. |
| APPLICANT: Duckert, J.Y. |
| TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins. |
| TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins. |
| FILE REFERENCE: 59.US2.REG |
| CURRENT APPLICATION NUMBER: US/09/513,999C |
| CURRENT FILING DATE: 2000-02-24 |
| PRIOR PELICATION NUMBER: US 60/122,487 |
| NUMBER OF SEQ ID NOS: 36681 |
| SOFTWARE: Patent.pm |
| SEQ ID NO 3684 |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          258 AGCGAAGGTTGCAACAAGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAAC 199
                                                                             1527 TACAGGCGCTCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        378 recreacrerecreanagrecanceanagracrecrarrarrangeceeeccarra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             318 TGGAATACAATACATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGCGAAGGTTGCAACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        605 TGGTGGCTCTGCTGGAAAGTGGAACGGAAAAGTGCTGCTAATTGATAGCCGGCCATTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGGAATACAATACATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 378;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-557-921-1

Sequence 1, Application US/09557921

Patent No. 6551810

GENERAL INFORMATION:

APPLICANT: Luche, Ralf M.

APPLICANT: Wei, Bo

TITLE OF INVENTION: DSP-10 DUAL-SPECIFICITY PHOSPHATASE;

FILE REFERENCE: 200125.416

CURRENT APPLICATION NUMBER: US/09/557,921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 187.8; DB 4;
Pred. No. 1.7e-48;
0; Mismatches 2;
                                                                                                                                                                                  1587 AGCGTTCCTTCTCTGGATATCAAATCAG 1616
                                                                                                                                                                                                               1280 AGGGCTCCTTCTCCCTGGACATCAAGTCTG 1309
                                                                                                                                                                                                                                                                                                                                                               ; Sequence 3684, Application US/09513999C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            i TYPE: DNA
CRGANISM: 400 Sapiens
REATURE:
NAME/KEY: CDS
LOCATION: 16..377
FEATURE:
COCATION: 164
COCATION: 164
US-09-513-999C-3684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 5.6%;
Best Local Similarity 99.0%;
Matches 189; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATAAGGTAAAC 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATAAGGTTGAC
                                                                                                                                                                                                                                                                                                            RESULT 7
US-09-513-999C-3684/c
                             1165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGIH:
                                                                                                                     g
                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                          ò
                                                                                                                                                                                                                          d
                                                                                                                                                                                                               us-uy-uy-uxp-uxp-yzbu

gequence 1250, Application US/09949016

general INFORMATION:
APPLICANT: VENTER, J. Craig et al.
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF;
FILE REPRENCE: CLOU1307
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
FRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
FRIOR FILING DATE: 2000-10-03
FRIOR FILING DATE: 2000-10-03
FRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 207012
SOCTHARE: PSELSEQ for Windows Version 4.0
SEQ ID NO 3250
LENGTH: 2351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      987 AGCCTGACTTTATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTG 1046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1287 AGATTAAGAACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGG 1346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1407 TCAGTCCACCCTGTGCCGACTCTGCTACCTCAGAGGCAGCAGAAAGGCCCGTGCATC 1466
     1246 AGCAGGGCCTGCGCGCCTGCACCTCTCGGACCGCCTGCAGGACACTAACCGCCTCA 1305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1047 AGAAAATTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCA 1106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1107 ATGGATGTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCG 1166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1227 AAAGACCTACTATATCTCCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGA 1286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     944 GGCGCCCGTCCATCTCGCCCAACTTCAACTTCCTGGGCCAGCTGCTGGAGTACGAGCGCA 1003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ------ CCCCCTCAG 1051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1347 AGAAGCCAAATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCC 1406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1052 gaacacceaagecercicaceciaarcinaceacagagecececinaceacacacacacacian 1111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1467 CCGCCAGCGTGCCCAGCGTGCCCAGCGTGCAGCCGTCGCTTAGAGGACAGCCCGCTGG 1526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                704 AGCCTGACTTCATCTGCGAGAGCCGCTTCATGCGGGTCCCCATCAACGACAACTACTGTG 763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        764 AAAAACTGCTGCCTGGCTGGACAAGTCCATCGAGTTCATCGATAAAGCCAAGCTCTCCA 823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     824 GCTGCCAAGTCATCGTCCACTGTCTGGCTGGCATCTCCCGGCTCTGCCACCATCGCCATCG 883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   884 CCTACATCATGAAGACCATGGGCATGTCCTCCGACGACGCCTACAGGTTCGTGAAGGAC 943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   927 AGGAGCTGATGCAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6.7%; Score 223.6; DB 4; Length 2351; 60.4%; Pred. No. 3.2e-59;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches 249;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1004 GCCTGAAGCTGCTGCCGCCCTGCAGGCGACCCGGGCA
                                                                                                     1306 AGCGCTCCTTCTCCCTGGACATCAAGTCTG 1335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches 417; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Human
                                                                                                                                                                                  RESULT 6
US-09-949-016-3250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-949-016-3250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
```

셤

ð

ઠે g g

ð

셤

Š

g ð a ò В ò g

ð

8 g

```
; NAME/KEY: CDS
; LOCATION: (114)...(1268)
US-09-922-146-3
                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-023-655-347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ଚ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                δ
                                                               日
                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 4617, Application US/09949016

Patent No. 681239

GENERAL INFORMATION:

APPLICANT: VENTER, D. Craig et al.

TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF

FILE REPRENCE: CLOO1307

CURRENT APPLICATION NUMBER: US/09/949,016

CURRENT APPLICATION NUMBER: 60/241,755

PRIOR APPLICATION NUMBER: 60/241,755

PRIOR APPLICATION NUMBER: 60/241,768

PRIOR FILING DATE: 2000-10-20

PRIOR FILING DATE: 2000-10-03

PRIOR FILING DATE: 2000-09-08

NUMBER OF SEQ ID NOS: 207012

SOFTWARE PRICESTED NOS: 207012

NUMBER OF SEQ ID NOS: 207012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1064 TIGGACAAATCAGIAGATTICATIGAGAAAGCAAAAGCTCCCAAIGGAIGIGTTICIAGIG 1123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATGAGGG 1183
                                                                                                                                                                                                                                                     1367 TCGGATGACCATGATGATTAGTCAAAGGCAAACGACCAATTATCTCCC 1426
                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                  1247 rehagagerriridagrircarrehagaaderrehecagrenggaagggerreren 1306
                                                                                                                                                                                                                                                                                                                                                                    1126 CTGTTTAGCTGGGATCTCCCGCTCCGCCATCGCTATCGCCTACATCATGAAGAGGAT 1185
                                                                                                                                                                                                                                                                                                                                                                                                GACTITICACTACAAGCAGATCCCCATCTCCGACCACGAGCCAGAACCTGTCGCGGTTC 917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      918 Trrccesageccarreagricarreagecrrerecesagaeregeserecrefic 977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1004 GAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTGCCGTGG
                                                                                                                                                                                                                              1006 GTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTTGTGAGAAAATTTTGCCGTGGTT
                                                                                                                                                                                                                                                                                                 1066 GGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCTCCCAATGGATGTGTTCTAGTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1246 AAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC 1297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                           ;
                                                                                                                                                          DB 4; Length 1830;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 2283;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches 115; Indels
                                                                                                                                                                                           Indels
                                                                                                                                                        3.3%; Score 109.6; DB 4; ilarity 61.0%; Pred. No. 3.6e-23; Conservative 0; Mismatches 114;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2.9%; Score 95; DB 4; I
58.8%; Pred. No. 1.8e-18;
CURRENT FILING DATE: 2000-04-20
NUMBER OF SEQ ID NOS: 20
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches 164; Conservative
                                                                                                         ORGANISM: Homo sapiens
                                                                                                                                                                             Best Local Similarity
Matches 178; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-949-016-4617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-949-016-4617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ ID NO 4617
LENGTH: 2283
                                                                       LENGTH: 1830
                                                                                                                          US-09-557-921-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                       TYPE: DNA
                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ŝ
                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
```

```
DUAL SPECIFIC PHOSPHATASE 9 EXPRESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1064 TIGGACAAAICAGIAGAITICATIGAGAAAGCAAAAGCTCCCAAIGGAIGTGTTCIAGIG 1123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1124 CACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATGAAGAGG 1183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           978 cacricorriogecososocicorricacioricacioricaciones caractraciones 1037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1038 CTCCACCTCTCTCTCAACGATGCCTATGACCTGGTCAAGAGGAAGAAGAGTCTAACATCTCC 1097
978 CACTGCTTGGCGGGGGTCAGCCGTTCTGTCACCGTCACTGTGGCCTACCTCATGCAGAAG 1037
                                                            1038 crccaccrcrcrcrcaacdardccrargaccrddrcaadagaagacrcraacarcrc 1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        858 GACTITICACIACAAGCAGATCCCCATCTCCGACCACAGGACCAGAACCTGTCGCGTTC 917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:

APPLICANT: Cocks, Benjamin G.

APPLICANT: Cocks, Benjamin G.

APPLICANT: Susan G. Stuart

APPLICANT: Stuart

APPLICANT: Jeffrey J. Scilaner

TITLE OF INVENTION: COMPOSITION FOR THE DETECTION OF BLOOD CELL GENE

TITLE OF INVENTION: EXPRESSION

NUMBER OF SUGURNES: 1508

CORRESPONDENCE ADDRESS:

ADDRESSEE: INCYTE PHARMACEUTICALS, INC.

STREE: 3174 PORTER DRIVE

CITY: PALO ALTO

STATE: CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  918 rrrccegaegecarreagricarreareagecerrereceagaecregegerecreere
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1004 GAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTGCCGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 2303;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 2.9%; Score 95; DB 4; Length 230
Best Local Similarity 58.8%; Pred. No. 1.8e-18;
Matches 164; Conservative .0; Mismatches 115; Indels
                                                                                                                                                                                                                         1244 CCAAACTICAATITICIGGGCCAACTCCIGGACTAIGAG 1282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1098 cccaactrcaactrcaredececagriecresactrreas 1136
                                                                                                                                                                                      1244 CCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAG 1282
                                                                                                                                                                                                                                                                                                                                                  US-09-922-146-3

US-09-922-146-3

Sequence 3, Application US/09922146

Patent No. 6566133

GENERAL INFORMATION:
APPLICANT: Lex M. Cowsert

APPLICANT: Brett P. Monia

TITLE OF INVENTYON: ANTISENSE MODULATION OF DUA
FILE REPRENCE: RTS-0252

CURRENT APPLICATION NUMBER: US/09/922,146

CURRENT FILING DATE: 2001-08-01

NUMBER OF SEQ ID NOS: 48

SEQ ID NO 3

LENGTH: 2303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 347, Application US/09023655 Patent No. 6607879
```

```
1124 CACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATGAAGAGG 1183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1105 GAGTTTAAATACAAGCAAATCCCCATCTCGGATCACTGGAGCCAAAACCTGTCCCAGTTT 1164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1165 rrcccrgaggccarrrcrrrcaragargaagcccggggcaagaacrgrggrgrcrrggra 1224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1225 CATTGCTTGCCTCGCTTAGCCGCTCAGTCACTGTGACTGTGGCTTACCTTATGCAGAAG 1284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 946, Application US/09023655; Patent No. 6607879
; General information:
    APPLICANT: Cocks, Benjamin G. APPLICANT: Susan G. Stuart
    APPLICANT: Jeffrey J. Sellhamer
    TITLE OF INVENTION: EXPRESSION
    NUMBER OF SEQUENCES: 1508
    NUMBER OF SEQUENCES: 1508
    CORRESPONDENCE ADDRESSES: ADDRESSES: ADDRESSES: INCYTE PHARMACEUTICALS, INC.
    STREET: 3174 PORTER DRIVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1004 GAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTGCCGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1064 TTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCTTCCAATGGATGTGTTCTAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1244 CCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAT 1290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1345 ccraactrcaactrcarggrcagcrcrcrcaactrcaagaggaggrcr 1391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 2109;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 2.7%; Score 90.2; DB 4; Length 2 Best Local Similarity 57.1%; Pred. No. 5.6e-17; Matches 164; Conservative 0; Mismatches 123; Indels
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                 ATTORNEY AGENT INFORMATION:
NAME: Zeller, Karen J.
REGISTRATION NUMBER: 37,071
REFERENCE DOCKET NUMBER: PA-0002 US
TELECOMUNICATION INFORMATION:
TELEPHONE: (650) 845-4166
INFORMATION FOR SEQ ID NO: 1135:
SEQUENCE CHARACTERISTICS:
LENGTH: 2109 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                       US/09/016,434
                                                                                                                                                APPLICATION NUMBER: US
                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ZIP: 94304
COMPUTER READABLE FORM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: PALO ALTO STATE: CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LIBRARY: GENBANK
CLONE: 91418933
US-09-016-434-1135
                                                                                                                                                                                           FILING DATE: HI
                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: line IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 13
US-09-023-655-946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1137 GGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATGAAGAGGATGGACATGTCTT 1196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1197 TAGATGAAGCTTACAGATTTGTGAAAAAAAAAGACCTACTATATCTCCAAACTTCAATT 1256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     64 GGGTGTCCCGCTCCGCCATCGTCATCGCTTACTTGATGAAGCACACTCGGATGACCA 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          124 TGACTGATGCTTATAAATTTGTCAAAGGCAAACGACCAATTATCTCCCCAAACCTTAACT 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1077 TAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTTCTAGTGCACTGTTTAGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4 rrakarrantakagakacrakacagrarggakagagarrancrarcakragaarg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1135. Application US/09016434
Patent No. 6500938
GENERAL INFORMATION:
APPLICANT: Jeffrey J. Seilhamer
TITLE OF INVENTION: PATHWAY GENE EXPRESSION
NUMBER OF SEQUENCES: 1490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2.8%; Score 94.6; DB 4; Length 1208; 64.3%; Pred. No. 1.5e-18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     79; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1257 TTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC 1297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          184 rearicidedeciracitacia de la rearicidad de la rearici
                                                                          COMPUTER READABLE FORM:
MEDLUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/023,655
FILING DATE: HEREWITH
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
ADDRESSEB: INCYTE PHARMACEUTICALS, INC.
STREET: 3174 PORTER DRIVE
CITY: PALO ALTO
STATE: CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Zeller, Karen J.
REGISTRATION NUMBER: 37,071
REFERENCE/DOCKET NUMBER: PA-0001 US
TELECOMUNICATION INPORMATION:
TELEPHONE: (650) 845-0166
INFORMATION FOR SEQ ID NO: 347:
SEQUENCE CHARACTERISTICS:
LENGTH: 1208 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE:
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CITY: PALO ALTO
STATE: CALIFORNIA
COUNTRY: USA
ZIP: 94304
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity 64.3
Matches 142; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA: APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; LIBRARY: THYRNOT03
; CLONE: 1444245
US-09-023-655-347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: line IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 12
US-09-016-434-1135
           COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ሯ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
```

. 0

```
TYPE: DNA
ORGANISM: Human
                                                                                                                TYPE: DNA
ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-949-016-14992
                                                                                                                                                          US-09-949-016-2615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 13782
                                                                                                                                                                                                                           Best Local Simi
Matches 164;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1244
                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Š
                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 2615, Application US/09949016

Sequence 2615, Application US/09949016

GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
FILE REPERENCE: CLOL1307
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT PILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR PLING DATE: 2000-10-03
PRIOR PLING DATE: 2000-10-03
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR PLING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 207012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1004 GAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTGCCGTGG 1063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1105 GAGTTTAAATACAAGCAAATCCCCATCTCGGATCACTGGAGCCAAAACCTGTCCCAGTTT 1164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1064 TTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTTCTAGTG 1123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1165 trcccrgaggccarrrcrrrcaragargaagcccggggcaagaacrgrggrgrcrrggra 1224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1124 CACTGTTTAGCTGGGATCTCCCGCTCCGCCATCGCTATCGCCTACATCATGAAGAGG 1183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1225 CATTGCTTGCTGCCTTTAGCCGCTCAGTCACTGTGACTGTGGCTTACCTTATGCAGAAG 1284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1285 crcaarcricricargaaccariccrargacarricraaaargaaaarccaacararicc 1344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1244 CCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAT 1290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1345 ccraactricaactricarescrescrestiseactricaasassasses 1391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2.7%; Score 90.2; DB 4; Length 2109; 57.1%; Pred. No. 5.6e-17;
COMPUTER: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/023,655
FILING DATE: HEREWITH
CLASSIFICATION:
PRIOR APPLICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches 123;
                                                                                                                                                                                                                                                                                        CLASSIFTCATION:
ATTORNEY/AGENT INFORMATION:
NAME: Zeller, Karen J.
NAME: Zeller, Karen J.
REGISTRATION NUMBER: 37,071
REFERENCE/DOCKET NUMBER: PA-0001 US
TELECOMMUNICATION INFORMATION:
TELEPAN: (650) 845-4166
INFORMATION FOR SEQ ID NO: 946:
SEQUENCE CHARACTERISTICS:
LENGTH: 2109 base pairs
TYPE: nucleic acid
TYPE: strandEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches 164; Conservative
                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; LIBRARY: GENBAN
; CLONE: 91418933
US-09-023-655-946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: line
IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 14
US-09-949-016-2615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
```

```
APPLICANT: VENTER, J. Craig et al.

TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED

TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED

TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF

FILE REFERENCE: CLOOL307

CURRENT FILING DATE: 2000-04-14

PRIOR FILING DATE: 2000-10-20

PRIOR FILING DATE: 2000-10-30

PRIOR FILING DATE: 2000-10-03

PRIOR FILING DATE: 2000-10-03

PRIOR FILING DATE: 2000-10-03

PRIOR FILING DATE: 2000-10-03

PRIOR FILING DATE: 2000-09-08

NUMBER OF SEQ ID NOS: 207012

SOFTWARE: FRASEEQ for Windows Version 4.0

SEQ ID NOS: 207012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATGAAGAGG 1183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9650 ICCCGCCCTCCAGGATCTGATGACGCAAAATGGAATAAGCTACGTCCTCAACGCCAGCA 9709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            975 ATACCTGTCCAAAGCCTGACTTTATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATG 1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9710 ACTOCTGCCCAAGCCTGACTTCATCTGCGAGAGCCGCTTCATGCGGGTCCCCATCAACG 9769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1254 Trccraaggccarrrcrrrcaradargangangcccggggcangaacrgrggrgrcrrggra 1313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1374 crcaarcigregargaacgargecrargacarreraaaargaaaarceaacararee 1433
                                                                                                                                                                                                                                                                                                                                                                                                                          1194 GAGITIAAAIACAAGCAAAICCCCAICTCGGAICACIGGAGCCAAAACCIGICCCAGITI 1253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1314 Carriccrirescriescarrasccecricasrcacrereacrerescriacerrateceas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 915 TCACCTGCTTGCAGGAGCTGATGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCA
                                                                                                                                                                                                                                                                                                                                                                    1004 GAGICICATITICCIGCGIGIGCCIGIGAAIGACAGCITITIGIGAGAAAAITITIGCCGIGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1064 TIGGACAAATCAGTAGATTICATTGAGAAAGCAAAAGCCTCCAAIGGAIGTGTTCTAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1035 ACAGCTTTTGTGAGAAAATTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTG 1088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9770 Acaactactigigaaaaactigctigcctiggcadaaagtccatcgagttcatcg 9823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
0
                                                                                                                                                                                                                                                                                                    .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 13782;
                                                                                                                                                                                                                                 2.7%; Score 90.2; DB 4; Length 2475;
llarity 57.1%; Pred. No. 6.4e-17;
Conservative 0; Mismatches 123; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAT 1290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1434 ccraacricaacricardddrcagcricarddacricdadagacdcr 1480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2.7%; Score 89.2; DB 4;
69.5%; Pred. No. 5.1e-16;
tive 0; Mismatches 53;
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 2615
LENGTH: 2475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-949-016-14992
; Sequence 14992, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches 121; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                         Similarity
```

Search completed: September 1, 2005, 02:13:59 Job time : 598 secs

Appl:
Appl:
Appl:
Appl:
Appl:
Appl:
Appl:
Appl:
Appl:

Sequence Sequence Sequence

Sequence Sequence Sequence

Sequence Sequence Sequence

Sequence Sequence Sequence Sequence Sequence Sequence Sequence

Sequence Sequence Sequence

1.

Run on:

Σ

```
US-09-949-016-10840
US-09-270-767-44366
US-09-270-767-59790
US-09-955-732A-10
US-09-955-732A-17
US-08-530-290-21
US-08-530-290-21
US-09-371-671B-8
US-09-371-671B-8
US-09-371-671B-8
US-09-955-732A-9
US-09-955-732A-9
US-09-955-732A-9
US-09-955-732A-9
US-09-955-732A-9
US-09-554-971-6-15
US-09-544-716-15
US-09-544-716-17
US-09-619-380-18
US-09-619-380-18
US-09-619-380-19
US-09-718-45-806
US-09-718-45-806
US-09-718-45-806
US-09-718-48-806
US-09-58-118-806
US-09-58-118-806
US-09-58-118-806
                                                                                                                                                                                                                                                                                                                                                                     US-09-371-6718-11

US-08-990-24

US-08-990-379-6

US-08-990-379-4

US-08-300-379-4

US-09-702-705-805

US-09-702-705-805

US-09-702-705-805

US-09-736-457-805

US-09-614-1248-805

US-09-614-1248-805

US-09-671-325-805

US-09-671-325-805

US-09-671-325-805

US-09-671-325-805

US-09-671-325-805

US-09-671-325-805

US-09-658-824-805

US-09-658-824-805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-816-494-8
US-09-949-016-10939
US-09-949-016-6494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-589-184-827
US-09-658-824-805
US-09-658-824-805
US-08-990-379-5
US-08-990-379-5
                                                                                                                                                                                                                                                                                                                             US-09-658-824-806
US-08-990-379-7
US-09-164-193-22
US-09-221-448A-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-544-716-18
US-09-557-921-19
US-09-564-357-21
US-09-619-380-20
US-09-704-139-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -09-557-921-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-557-921-14
US-09-564-357-22
     44103, A
10488, A
8, Appli
32, Appl
5, Appli
6, Appli
4, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           l, Ap
Appli
Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Appl
Appl
Appl
Appl
Appl
Appl
                                                                                                                                                                                                                                                                                                                                                                                              Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                          , Search time 43 Seconds
(without alignments)
17.360 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 9,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence Seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                              sued_patents_AA:*
/cgn2_6/ptodata/1/laa/5A_COMB.pep:*
/cgn2_6/ptodata/1/laa/5B_COMB.pep:*
/cgn2_6/ptodata/1/laa/6A_COMB.pep:*
/cgn2_6/ptodata/1/laa/6B_COMB.pep:*
/cgn2_6/ptodata/1/laa/BECOMB.pep:*
/cgn2_6/ptodata/1/laa/PCTUS_COMB.pep:*
/cgn2_6/ptodata/1/laa/backfile81.pep:*
               GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-371-671B-9
US-09-955-732A-6
US-09-955-732A-3
US-09-955-732A-3
US-09-544-716-13
US-09-544-716-13
US-09-619-380-15
US-09-619-380-15
US-09-544-716-12
US-09-557-921-12
US-09-557-921-12
US-09-564-357-17
US-09-564-357-17
US-09-564-357-17
US-09-564-357-17
US-09-564-357-17
US-09-564-357-17
US-09-564-357-17
US-09-949-016-9486
US-09-949-016-9486
US-09-949-016-9121
US-09-949-016-9181
US-09-949-016-9181
US-09-949-016-9181
US-09-744-072-32
US-09-744-072-32
US-09-744-072-32
US-09-744-072-32
US-09-564-357-6
US-09-564-357-6
US-09-564-357-6
US-09-564-357-6
US-09-564-357-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -09-270-767-44103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -09-949-016-10488
                                                                                                                                                                                                                  Total number of hits satisfying chosen parameters:
                                                                                                                                                                                            513545 segs, 74649064 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                          SUMMARIES
                                                                                                                                                                                                                                                                   Minimum Match 0%
Maximum Match 100%
Listing first 100 summaries
                                                        protein search, using sw model
                                                                          August 31, 2005, 11:02:23
                                                                                                                                                              BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                       seq length: 0
seq length: 200000000
                                                                                                                 US-09-964-277-16
52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                          1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Issued
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query
Match ]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0
100.0
98.1
98.1
98.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1000.0
1000.0
1000.0
1000.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1000.0
1000.0
1000.0
1000.0
                                                                                                                                                                                                                                                                                                                                                         4. ru '6'
                                                                                                                                                                                                                                                                        Post-processing:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Title:
Perfect score:
                                                                                                                                                              Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score
                                                           ı
                                                                                                                                                                                                                                        Minimum DB
Maximum DB
                                                          protein
                                                                                                                                            Sequence:
                                                                                                                                                                                                                                                                                                                 Database
```

Result Š.

Appli Appli Appl App App App

Sequence Sequence Sequence Sequence

Sequence Sequence Sequence

Sequence Sequence Sequence Sequence

6, Appli 60, Appl 4, Appli 23, Appl 805, App

Sequence Sequence Sequence Sequence Sequence Sequence Sequence

Sequence Sequence Sequence Sequence

5, Appli 8081, Ap 10840, A 44366, A

Sequence Sequence Sequence Sequence

Sequence Sequence Sequence

Sequence Sequence Sequence

827, 805, 827,

Sequence Sequence Sequence

Sequence Sequence Sequence Sequence

5, Appli 8, Appli 10939, A 6494, Ap

Sequence Sequence Sequence

Sequence Sequence

14, 22,

Sequence Sequence ò

Gaps

ö

0; Indels

Length 156;

Score 52; DB 4; Pred. No. 0.018; 0; Mismatches

100.0%;

```
US-09-955-732A-4

1 Sequence 4, Application US/09955732A

2 Sequence 4, Application US/09955732A

3 Patent No. 6825021

3 GENERAL INCRMATION:

4 APPLICANT: Luche, Ralf M.

5 APPLICANT: Luche, Ralf M.

7 ITLE OF INVENTION: DSP-15 DUAL-SPECIFICITY PHOSPHATASE

7 ITLE OF INVENTION: DSP-15 DUAL-SPECIFICITY PHOSPHATASE

7 CURRENT APPLICATION NUMBER: US/09/955,732A

7 CURRENT FILING DATE: 2001-09-18

7 SOFTWARE PASESQ for Windows Version 4.0

7 SEQ 1D NO 4.0

7 SEQ 1D NO 4.0
TITLE OF INVENTION: DSP-15 DUAL-SPECIFICITY PHOSPHATASE FILE REFERENCE: 200125,433
CURRENT APPLICATION NUMBER: US/09/955,732A
CURRENT FILING DATE: 2001-09-18
NUMBER OF SEQ ID NOS: 29
SOFTWARE: FARESEQ for Windows Version 4.0
SEQ ID NO 3
LENGTH: 156
                                                                                                                                                                                                                                                                           Query Match 100.
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                             97 VHCLAGISRS 106
                                                                                                                                                                                                                                                                                                                                                                   1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: PRT
CRGANISM: Homo sapiens
US-09-955-732A-4
                                                                                                                                                                                     TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                 US-09-955-732A-3
                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                         Sequence 9, Application US/09371671B
Fatent No. 6548743
GENERAL INFORMATION:
APPLICANT: Sheen, Jen
TITLE OF INVENTION: TRANSGENIC PLANTS EXPRESSING A
TITLE OF INVENTION: UDAL-SPECIFICITY MAPK PHOSPHATASE AND USES THEREOF
FILE REFERENCE: 00786/370002
CURRENT APPLICATION NUMBER: US/09/371,671B
CURRENT PLILING DATE: 1999-08-10
PRIOR APPLICATION NUMBER: 60/155,934
PRIOR FILING DATE: 1999-01-14
PRIOR FILING DATE: 1999-01-03
NUMBER OF SEQ ID NOS: 11
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 9
LEMOTH: 87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 100.0%; Score 52; DB 4; Length 155; Best Local Similarity 100.0%; Pred. No. 0.018; Matches 10; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 52; DB 4; Length 87; 100.0%; Pred. No. 0.0096; rive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 6, Application US/09955732A

Patent NO. 6825021

GENERAL INFORMATION:
APPLICANT: Luche, Ralf M.
APPLICANT: Wei, Bo
TITLE REFERENCE: 200125-433
CURRENT APPLICATION NUMBER: US/09/955,732A
CURRENT FILING DATE: 2001-09-18
NUMBER OF SEQ ID NOS: 29
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  96 VHCLAGISRS 105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Rat rattus
US-09-371-671B-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ ID NO 6
LENGTH: 155
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 2
US-09-955-732A-6
                                                                                                                      RESULT 1
US-09-371-671B-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JS-09-955-732A-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT
```

ò

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                      Gaps
                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
100.0%; Score 52; DB 4; Length 168;
Best Local Similarity 100.0%; Pred. No. 0.019;
Matches 10; Conservative 0; Mismatches 0; Indels
         100.0%; Score 52; DB 4; Length 156; 100.0%; Pred. No. 0.018;
                                                                                                                                                                                                            US-09-544-716-13
US-09-544-716-13
Sequence 13, Application US/09544716
Sequence 13, Application US/09544716
Sequence 13, Application US/09544716
Sequence 13, Application US/09544716
TITLE NETERAL ILUCHO, Ralf M.
APPLICANT Wei, Bo
TITLE OF INVENTION: DSP-9 DUAL-SPECIFICITY PHOSPHATASE
FILLE REFERENCE: 200125.415
CURRENT APPLICATION NUMBER: US/09/544,716
CURRENT FILING DATE: 2000-04-10
NUMBER OF SEQ ID NOS: 20
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 13
LENGTH: 168
                                                      0; Indels
                                                      Mismatches
                                                      .
0
Query Match
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                          97 VHCLAGISRS 106
                                                                                              1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-544-716-13
```

Sequence 3, Application US/09955732A patent No. 6825021

RESULT 3 US-09-955-732A-3

8

GENERAL INFORMATION: ; APPLICANT: Luche, Ralf M.; ; APPLICANT: Wei, BO

```
1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 VHCLAGISRS 10
                                                                                                                                                                                                1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
CRGANISM: Homo sapiens
US-09-544-716-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
CRGANISM: Homo sapiens
US-09-544-716-12
                                    TYPE: PRT
ORGANISM: Homo sapiens
US-09-619-380-15
                                                                                                                                     Best Local Similarity
Matches 10; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 11
US-09-557-921-12
                                                                                                                                                                                                                                                                                             RESULT 9
US-09-544-716-12
                      LENGTH: 168
SEQ ID NO 15
                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                ò
                                                                                                                                                                                                                                     d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Score 52; DB 4; Length 168; 100.0%; Pred. No. 0.019; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 100.0%; Score 52; DB 4; Length 168; Best Local Similarity 100.0%; Pred. No. 0.019; Matches 10; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-619-380-15
; Sequence 15, Application US/09619380
; Patent No. 664931
; GENERAL INCRMATION:
; APPLICANT: Luche, Ralf M.
; APPLICANT: Wei, Bo
; TITLE OF INVENTION: DSP-11 DUAL SPECIFICITY PHOSPHATASE
; FILE REFERENCE: 200125.418
; CURRENT APPLICATION NUMBER: US/09/619,380
; CURRENT FILING DATE: 2000-07-19
; NUMBER OF SEQ 1D NOS: 22
; SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 7
US-09-564-357-16
i Sequence 16, Application US/09564357
patent No. 6645753
GENERAL INFORMATION:
APPLICANT: Luche, Ralf M.
TITLE OF INVENTION: DSP-5 DUAL-SPECIFICITY PHOSPHATASE
TITLE OF INVENTION: DSP-5 DUAL-SPECIFICITY PHOSPHATASE
TITLE REFERENCE: 200125.413
CURRENT APPLICATION NUMBER: US/09/564,357
CURRENT FILING DATE: 2000-04-24
NUMBER OF SEO ID NOS: 22
NUMBER OF SEO ID NOS: 22
SEO ID NO 16
LENGTH: 168
LINGTH: 168
TYPE: PRT
CORGANISM: Homo sapiens
                                                                                              Sequence 13, Application US/09557921

Sequence 13, Application US/09557921

Patent No. 6551810

GENERAL INFORMATION:
APPLICANT: Luche, Ralf M.
APPLICANT: Wei, Bo
TITLE OF INVENTION: DSP-10 DUAL-SPECIFICITY PHOSPHATASE
FILE REFERENCE: 200125.416

CURRENT FILING DATE: 2000-04-20

CURRENT FILING DATE: 2000-04-20

NUMBER OF SEQ ID NOS: 200
                                                                                                                                                                                                                                                                                                                     FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity 100.
Matches 10, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              108 VHCLAGISRS 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     108 VHCLAGISRS 117
  |||||||||||
108 VHCLAGISRS 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Homo sapiens
US-09-557-921-13
                                                                                                                                                                                                                                                                                                                 SOFTWARE: Fas
SEQ ID NO 13
LENGTH: 168
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                        a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Score 52; DB 4; Length 170; 100.0%; Pred. No. 0.019; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 52; DB 4; Length 170; 100.0%; Pred. No. 0.019; ive 0; Mismatches 0; Indels
100.0%; Score 52; DB 4; Length 168; 100.0%; Pred. No. 0.019;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 10
US-09-544-716-14
; Sequence 14, Application US/09544716
; Patent No. 6492157
; GENERAL INFORMATION:
; APPLICANT: Luche, Ralf M.;
APPLICANT: Wei, Bo
TITLE OF INVENTION: DSP-9 DUAL-SPECIFICITY PHOSPHATASE;
FILE REFERENCE: 200125.415
; CURRENT APPLICATION NUMBER: US/09/544,716
; CURRENT FILING DATE: 2000-04-10
; NUMBER OF SEQ ID NOS: 20
; SOFTWARE: PastSEQ for Windows Version 4.0
; SEQ ID NO 14
                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
APPLICANT: Luche, Ralf M.
APPLICANT: Wei, Bo
TITLE OF INVENTION:
FILE REFERENCE: 200125.415
CURRENT APPLICATION NUMBER: US/09/544,716
CURRENT APPLICATION NUMBER: 2000-04-10
NUMBER OF SEQ ID NOS: 20
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 12
                                            0; Mismatches
                                                                                                                                                                                                                            ; Sequence 12, Application US/09544716 ; Patent No. 6492157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 100.
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 100.
Best Local Similarity 100.
Matches 10; Conservative
                                            10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    110 VHCLAGISRS 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   110 VHCLAGISRS 119
                                                                                                                         108 VHCLAGISRS 117
```

Gaps

;

```
100.0%; Score 52; DB 4; Length 170; 100.0%; Pred. No. 0.019; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 52; DB 4; Length 170; 100.0%; Pred. No. 0.019; ive 0; Mismatches 0; Indels
      100.0%; Score 52; DB 4; Length 170; 100.0%; Pred. No. 0.019;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:

APPLICANT: Luche, Ralf M.

APPLICANT: Wei, Bo.

TITLE OF INVENTON: DSP-11 DUAL SPECIFICITY PHOSPHATASE

TITLE REFERENCE: 200125.418

CURRENT FILING DATE: 2000-07-19

NUMBER OF SEQ ID NOS: 22

SEQ ID NO 14

LENGTH: 170

LENGTH: 170
                                                0; Indels
                                                                                                                                                                                                                                                                              GENERAL INFORMATIO:
APPLICANT: Luche, Ralf M.
APPLICANT: Luche, Ralf M.
TITLE OF INVENTION: DSP-5 DUAL-SPECIFICITY PHOSPHATASE;
FILE REFERENCE: 200125.413
CURRENT FILING DATE: 2000-04-24
NUMBER OF SEQ ID NOS: 22
NUMBER OF SEQ ID NOS: 22
SEQ ID NO 17
LENGTH: 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 16, Application US/09619380
Patent No. 6649391
GENERAL INFORMATION:
A APPLICANT: Luche, Ralf M.
APPLICANT: Wei, Bo
TITLE OF INVENTION: DSP-11 DUAL SPECIFICITY PHOSPHATASE
                                              0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 14, Application US/09619380 Patent No. 6649391
                                                                                                                                                                                                                                      Sequence 17, Application US/09564357 Patent No. 6645753
      Query Match 100.
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 100.
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 100.
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     110 VHCLAGISRS 119
                                                                                                                                110 VHCLAGISRS 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     110 VHCLAGISRS 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 VHCLAGISRS 10
                                                                                          1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
CORGANISM: Homo sapiens
US-09-619-380-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Homo sapiens US-09-564-357-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-619-380-16
                                                                                                                                                                                                                         US-09-564-357-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-619-380-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 16
                                                                                             δ
                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       임
                                                                                                                                                                                                                                                                                                                                                                                                                   .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                   ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 52; DB 4; Length 170; 100.0%; Pred. No. 0.019; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 52; DB 4; Length 170; 100.0%; Pred. No. 0.019;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; Sequence 11. Application US/09557921
; Patent No. 6551810
; GENERAL INFORMATION:
; APPLICANT: Luche, Ralf M.
; APPLICANT: Wei, Bo
TITLE OF INVENTION: DSP-10 DUAL-SPECIFICITY PHOSPHATASE
; FILE REFERENCE: 200125.416
; CURRENT APPLICANTON NUMBER: US/09/557,921
; CURRENT FILING DATE: 2000-04-20
; NUMBER OF SEQ ID NOS: 20
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 15
; LENGTH: 170
                                                                                                            DSP-10 DUAL-SPECIFICITY PHOSPHATASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PHOSPHATASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 15, Application US/09564357
Patent No. 6645753
GENERAL INFORMATION:
APPLICANT: LUCHE, Ralf M.
APPLICANT: LUCHE, Ralf M.
TITLE OF INVENTION: DSP-5 DUAL-SPECIFICITY PHO:
TITLE OF INVENTION: DSP-5 DUAL-SPECIFICITY PHO:
CURRENT APPLICATION NUMBER: US/09/564,357
CURRENT FILING DATE: 2000-04-24
NUMBER OF SEQ ID NOS: 22
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 15.
Sequence 12, Application US/09557921
Patent No. 6551810
GENERAL INPORMATION:
APPLICANT: Luche, Ralf M.
APPLICANT: Wei, Bo
TITLE OF INVENTION: DSP-10 DUAL-SPECIFICITY FILE REFERENCE: 200125.416
CURRENT APPLICATION NUMBER: US/09/557,921
CURRENT FILING DATE: 2000-04-20
NUMBER OF SEQ ID NOS: 20
SOFTMARE: FastSEQ for Windows Version 4.0
SEQ ID NO 12
LENGTH: 170
                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity 100
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              110 VHCLAGISRS 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        110 VHCLAGISRS 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                     TYPE: PRT; ORGANISM: Homo sapiens
US-09-557-921-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-564-357-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 12
US-09-557-921-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 13
US-09-564-357-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-557-921-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                           Query Match
```

ઠ

ઠે

ö

Gaps

; 0

ö

Gaps ; 0

```
Sequence 2, Application US/09816494
Patent No. 6664089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 90..
Best Local 9; Conservative
                                                                                                                          Query Match
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      97 VHCLAGVSRS 106
                                                                                                                                                                                                                                          280 VHCLAGISRS 289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        242 VHCLAGISRS 251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 VHCLAGISRS 10
                                                                                                                                                                                                               1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 156
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
CORGANISM: Homo sapiens
US-09-816-494-2
                                        ; TYPE: PRT
; ORGANISM: Human
US-09-949-016-9121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 20
US-09-955-732A-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-955-732A-5
SEQ ID NO 9121
                                                                                                                                                                                                                                                                                                                        RESULT 19
US-09-816-494-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-949-016-8486

US-09-949-016-8486

Sequence 8486. Application US/09949016

Setent No. 6812339

GENERAL INFORMATION:

APPLICANT: VENTER, J. Craig et al.

TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED

TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF

FILE REFERENCE: CL001307

CURRENT PILING DATE: 2000-04-14

PRIOR APPLICATION NUMBER: 60/241,755

PRIOR PLING DATE: 2000-10-03

PRIOR FILING DATE: 2000-10-03

PRIOR FILING DATE: 2000-10-03

PRIOR FILING DATE: 2000-09-08

PRIOR FILING DATE: 2000-09-08

NUMBER OF SEQ ID NOS: 207012

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 8486

LENGTH- 40-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: VENTER, J. Czaig et al.
APPLICANT: VENTER, J. Czaig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH HUMAN DISBASE, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001307
CURRENT APPLICATION NUMBER: 60/241, 755
PRIOR APPLICATION NUMBER: 60/241, 755
PRIOR APPLICATION NUMBER: 60/237, 768
PRIOR APPLICATION NUMBER: 60/237, 768
PRIOR APPLICATION NUMBER: 60/237, 498
PRIOR PILING DATE: 2000-10-03
PRIOR PILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 207012
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Score 52; DB 4; Length 491; 100.0%; Pred. No. 0.059;
                                                                                                                                                                                                                                     100.0%; Score 52; DB 4; Length 170; 100.0%; Pred. No. 0.019;
                                                                                                                                                                                                                                                                                  0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Indels
                                                                                                                                                                                                                                                                                  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
  FILE REFERENCE: 200125.418
CURRENT APPLICATION NUMBER: US/09/619,380
UNMERN OF SEQ ID NOS: 22
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 9121, Application US/09949016 Patent No. 6812339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity 100.
Matches 10, Conservative
                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        401 VHCLAGISRS 410
                                                                                                                                                                                                                                                                                                                                                                       110 VHCLAGISRS 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                            1 VHCLAGISRS 10
                                                                                                        ; SEQ ID NO 16
; LENGTH: 170
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-619-380-16
                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 10; Conservat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 18
US-09-949-016-9121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-949-016-8486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                       ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
```

```
ö
                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                              .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
APPLICANT: Meyers, Rachel A.
TITLE OF INVENTION: 38629 AND 21117, NOVEL DUAL SPECIFICITY
TITLE OF INVENTION: 38629 AND 21117, NOVEL DUAL SPECIFICITY
TITLE OF INVENTION: PHOSPHATASE MOLECULES AND USES THEREFOR
FILE REFERENCE: 10448-030002
CURRENT APPLICATION NUMBER: US 60/1944
CURRENT APPLICATION NUMBER: US 60/191,858
PRIOR FILING DATE: 2000-03-24
NUMBER OF SEQ ID NOS: 10
SOFTWARE: FastSEQ for Windows Version 4.0
LENGTH: 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; Score 52; DB 4; Length 665; 100.0%; Pred. No. 0.081;
100.0%; Score 52; DB 4; Length 661; 100.0%; Pred. No. 0.081;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98.1%; Score 51; DB 4; Length 156; 90.0%; Pred. No. 0.028; ive 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; Sequence 5, Application US/09955732A; Sequence 5, Application US/09955732A; Patent No. 6825021; GENERAL INFORMATION:
; APPLICANT: Luche, Ralf M.; APPLICANT: Wei, BO; TITLE OF INVENTION: DSP-15 DUAL-SPECIFICITY PHOSPHATASE; FILE REFERENCE: 200125.433; CURRENT APPLICATION NUMBER: US/09/955,732A; CURRENT PILING DATE: 2001-09-18; NUMBER OF SEQ 1D NOS: 29; SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches
                                                    0; Mismatches
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 92.3%; Score 48; DB 3; Length 226; 80.0%; Pred. No. 0.15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               88.5%; Score 46; DB 4; Length 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Indels
                                                                                                                                    2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FERENT NO. 86.23.48

JERREAL INCORMATION:
APPLICANT: SCHERER, STEPHEN W.
APPLICANT: MINASIAN, BERGE A.
APPLICANT: BOULEN, BERGE A.
APPLICANT: BOULEN, GUY
APPLICANT: DALGADO-ESCUETA, ANTONIO
TITLE OF INVENTION: LAFORA'S DISEASE GENE
FILE REFERENCE: 086671/0113
CURRENT APPLICATION NUMBER: 05/093,495
PRIOR FILING DATE: 1999-07-20
PRIOR FILING DATE: 1998-07-20
PRIOR FILING DATE: 1998-07-20
PRIOR FILING DATE: 1998-04-21
NUMBER OF SEQ ID NOS: 32
SOFTWARE: PEACENTIN VET: 2.1
SEQ ID NO 32
LENGTH: 11
                 ADDRESSEE: Incyte Pharmaceuticals, Inc. STREET: 3174 Porter Drive CITY: Palo Alto STATE: California COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 32, Application US/09744072 Patent No. 6825328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INPORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 226 amino acids
TYPE: amino acid
STRANDENESS: single
TOPOLOGY: linear
IMMEDIATE SOURCE:
LIBRARY: GenBank
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: (650) 845-4166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity 80.0
Matches 8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |||:||:|||
96 VHCVAGVSRS 105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 VHCLAGISRS 10
CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLONE: 1495338
                                                                                                                       94304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-744-072-32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-744-072-32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-045-973-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 10488, Application US/09949016
; Sequence 10488, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VBTER, J. Craig et al.
; TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/231,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR PLILING DATE: 2000-10-03
; PRIOR PLILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTHARE: PSECSEQ for Windows Version 4.0
; SEQ ID NO 10488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                         GENERAL INFORMATION:
APPLICANT: Homburger et al.
APPLICANT: Homburger et al.
TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
FILE REFERENCE: File Reference: 7326-094
CURRENT APPLICATION NUMBER: 1999-03-17
CURRENT FILING DATE: 1999-03-17
NUMBER OF SEQ ID NOS: 62517
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 44103
LENGTH: 207
                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                      .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 23
US-09-045-973-8
Squence 8, Application US/09045973
Patent No. 6165767
GENERAL INFORMATION:
APPLICANT: Lal, Preeti
APPLICANT: Corley, Neil C.
APPLICANT: Guegler, Karl J.
APPLICANT: Baughn, Mariah
TILLE OF INVENTION: PROTEIN PHOSPHATASE RELATED MOLECULES
NUMBER OF SEQUENCES: 9
                                                                                                                                                                                                                                                                                                                                                                             Query Match 98.1%; Score 51; DB 4; Length 207; Best Local Similarity 90.0%; Pred. No. 0.037; Matches 9; Conservative 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98.1%; Score 51; DB 4; Length 421; 90.0%; Pred. No. 0.078;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1; Mismatches
RESULT 21
US-09-270-767-44103
; Sequence 44103, Application US/09270767
; Patent No. 6703491
                                                                                                                                                                                                                                                                                                              ) ORGANISM: Drosophila melanogaster
US-09-270-767-44103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       96 VHCLAGVSRS 105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      325 VHCLAGVSRS 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity
Matches 9; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-949-016-10488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                              TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
```

Gaps

Gaps

; 0

```
Sequence 21, Application US/08530290
Patent No. 5958721
GENERAL INFORMATION:
APPLICANT: Marshall, Christopher John
APPLICANT: Ashworth, Alan
APPLICANT: Hughes, David Anthony
TITLE OF INVENTION: Methods for Screening of Substances for TITLE OF INVENTION: The Applicant The Application Therapeutic Activity and Yeast for Use Therein NUMBER OF SEQUENCES: 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OTHER INFORMATION: Conserved homology region from eight DSPs having OTHER INFORMATION: MAP-kinase phosphatase activity
                                                                                                                                                                                                Score 46; DB 4; Length 24;
Pred. No. 0.035;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: Luche, Ralf M.
APPLICANT: Luche, Ralf M.
TITLE OF INVENTION: DSP-15 DUAL-SPECIFICITY PHOSPHATASE
TITLE REFERENCE: 200125-433
CURRENT APPLICATION NUMBER: US/09/955,732A
CURRENT PLING DATE: 2001-09-18
NUMBER OF SEQ ID NOS: 29
SEQ ID NO 17
LENGTH: 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 46; DB 4; Length 24;
Pred. No. 0.035;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: PatentIn Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP STREET: Two Embarcadero Center, Eighth Floor CTTY. San Francisco STATE: California
CURRENT APPLICATION NUMBER: US/09/619,380 CURRENT FILING DATE: 2000-07-19 NUMBER OF SEQ ID NOS: 22 SOFTWARE: PastSEQ for Windows Version 4.0 SEQ ID NO 4 LENGTH: 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                       ; Sequence 17, Application US/09955732A
; Patent No. 6825021
                                                                                                                                                                                                  88.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     88.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT ORGANISM: Artificial Sequence
                                                                                                                                                                                 Ouery Match
Best Local Similarity 90.v-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6 VHCQAGISRS 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                 1 VHCLAGISRS 10
                                                                                                                     TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 9; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 94111-3834
                                                                                                                                                                                                                                                                                                                                                                                      RESULT 28
US-09-955-732A-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-08-530-290-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY:
                                                                                                                                                              US-09-619-380-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 29
                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                           ö
                                                                                                                                                                                                Sequence 5, Application US/09544716

Patent No. 6492157

GENERAL INFORMATION:
APPLICANT: LUCHE, Ralf M.
APPLICANT: Wei, Bo
TITLE OF INVENTION: DSP-9 DUAL-SPECIFICITY PHOSPHATASE
FILE REFERENCE: 200125.415
CURRENT APPLICANTON UNMBER: US/09/544,716
CURRENT FILING DATE: 2000-04-10
NUMBER OF SEQ ID NOS: 20
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 5
LENGTH: 23
TYPE: PRT:
CRAMISM: Homo sapiens
US-09-544-716-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       88.5%; Score 46; DB 4; Length 23; 90.0%; Pred. No. 0.033; 1; Indels tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 46; DB 4; Length 23;
Pred. No. 0.033;
                         1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 4, Application US/09619380

BREENL NO. 6649391

GRNERAL INFORMATION:
APPLICANT: Luche, Ralf M.
APPLICANT: Wel, Bo
TITLE OF INVENTION: DSP-11 DUAL SPECIFICITY PHOSPHATASE
FILE REFERENCE: 2000125.418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Luche, Ralf M.
APPLICANT: Luche, Ralf M.
APPLICANT: Nei, Bo
ATILLE OF INVENTION: DSP-5 DUAL-SPECIFICITY PHOSPHATASE
FILE REFERENCE: 200125.413
CURRENT APPLICATION NUMBER: US/09/564,357
CURRENT FILING DATE: 2000-04-24
NUMBER OF SEQ ID NOS: 22
SOFTWARE: FASELSEQ for Windows Version 4.0
  Pred. No. 0.015;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 6, Application US/09564357; Patent No. 6645753; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     88.5%;
    90.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 90.0
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 88.5
Best Local Similarity 90.0
Matches 9; Conservative
    Best Local Similarity 90.0
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S VHCQAGISRS 14
                                                                1 VHCLAGISRS 10
                                                                                   1 VHCQAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5 VHCQAGISRS 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 26
US-09-564-357-6
                                                                                                                                                                 RESULT 25
US-09-544-716-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-564-357-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-619-380-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO 6
LENGTH: 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              원
                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                ò
```

ö

Gaps

ö

```
Sequence 7, Application US/09371671B
; Sequence 7, Application US/09371671B
; Patent No. 6548743
; GENERAL INFORMATION:
; APPLICANT: Sheen, Jan-Ling
; TITLE OF INVENTION: TRANSGENIC PLANTS EXPRESSING A
; TITLE OF INVENTION: DIAL-SPECIFICITY MAPK PHOSPHATASE AND USES THEREOF
; FILE REFERENCE: 00786/37009/371,671B
; CURRENT APPLICATION NUMBER: US/09/371,671B
; CURRENT PILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/155,934
; PRIOR PLILING DATE: 1999-01-14
; PRIOR FILING DATE: 1998-08-10
; NUMBER OF SEQ ID NOS: 11
; SEQ ID NO ?
; SEQ ID NO ?
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: TRANSGENIC PLANTS EXPRESSING A
TITLE OF INVENTION: DUAL-SPECIFICITY MAPK PHOSPHATASE AND USES THEREOF
FILE REFERENCE: 00786/370002
CURRENT APPLICATION NUMBER: US/09/371,671B
PRIOR APPLICATION NUMBER: 60/155,934
PRIOR APPLICATION NUMBER: 60/155,934
PRIOR APPLICATION NUMBER: 60/155,934
                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        88.5%; Score 46; DB 4; Length 87; 90.0%; Pred. No. 0.14; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                             88.5%; Score 46; DB 2; Length 72; 90.0%; Pred. No. 0.11;
                                                                                                                                                                                                                                                                                                                                                                                                                                             1; Indels
PILING DATE: 07-APR-1993
ATTORNEY/AGENT INFORMATION:
NAME: Bastian, Kevin L
RECISTRATION NUMBER: 34,774
REFERENCE/DOCKET NUMBER: 084611-00000US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
INFORMATION FOR SEQ ID NO: 19: SEQUENCE CHARACTERISTICS:
LENGTH: 72 aming acids
                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 8, Application US/09371671B Patent No. 6548743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 90..
Best Local 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 90.0
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: Sheen, Jen
APPLICANT: Chiu, Wan-Ling
                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26 VHCQAGISRS 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     34 VHCQAGISRS 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
CORGANISM: Homo sapiens
US-09-371-671B-7
                                                                                                                                                                                                                                                        TYPE: amino acid strandEDNESS:
                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                     TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-371-671B-8
                                                                                                                                                                                                                                                                                                                                                     US-08-530-290-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 31
US-09-371-671B-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 19, Application US/08530290
| Patent No. 5558721
| GENEMAL INFORMATION:
| GENEMAL INFORMATION:
| APPLICANT: Marshall, Christopher John
| APPLICANT: Marshall, Christopher John
| APPLICANT: Hughes, David Anthony TITLE OF INVENTION: Therapeutic Activity and Yeast for Use Therein NUMBER OF SEQUENCES: 24
| CORRESPONDENCE ADDRESS: ADDRESSEE: Townsend and Townsend and Crew LLP STREET: Two Embarcadero Center, Bighth Floor CITY: San Francisco STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 45;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION DATA:
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/530,290
FILING DATE: 14-DEC-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: WO PCT/GB94/00694
FILING DATE: 31-MAR-1994
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: GB 9402573.1
FILING DATE: 10-FEB-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: GB 9307250.2
                   APPLICATION NUMBER: US/08/530,290
FILING DATE: 14-DEC-1995
CLASSIFICATION DATA:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: WO PCT/GB94/00694
FILING DATE: 31-MAR-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: GB 9402573.1
FILING DATE: 10-FB8-1994
PRIOR APPLICATION NUMBER: GB 9307250.2
FILING DATE: 07-APR-1993
ATTONNEY/AGENT INFORMATION:
REGISTRATION NUMBER: 34,774
REGISTRATION NUMBER: 34,774
REGISTRATION NUMBER: 084611-00000US
TELEFORMUNICATION INFORMATION:
TELEFORMUNICATION INFORMATION:
TELEFORMUNICATION INFORMATION:
TELEFORMUNICATION SEQ 1D NO: 21:
SEQUENCE CHARACTERIFICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           88.5%; Score 46; DB 2;
90.0%; Pred. No. 0.068;
tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
       CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 45 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 90.0
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-530-290-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              34 VHCQAGISRS 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: amino acid STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY: USA
ZIP: 94111-3834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 30
US-08-530-290-19
```

à

ö

```
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-955-732A-8
                                                                                                                                                                                                                                                                                                                                 TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                    PCT-US93-12019-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-955-732A-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-955-732A-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                    .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               o,
                                                                                                                                                                                                      .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 1; Length 117;
                                                                                                                                                                     Score 46; DB 4; Length 87; Pred. No. 0.14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1; Indels
                                                                                                                                                                                                    1; Indels
                                                                                                                                                                                                                                                                                                                   RESULT 33
US-07-988-273-4
; Sequence 4, Application US/07988273
; Patent No. 5512434
; GENERAL INFORMATION:
APPLICANT: BOTTANC, Donald P.
APPLICANT: ISHIBASHI, Toshio
APPLICANT: MILKI, TOTA
TITLE OF INVENTION: EXPRESSION CLONING OF A HUMAN
TITLE OF INVENTION: PHOSPHATASE
NUMBER OF SEQUENCES: 7
; CORRESPONDENCE ADDRESS:
ADDRESSE: FOLEY & LATCHER
; STREET: 3000 K Street, N.W., Suite 500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CALIF: 2000-13109
COMPUTER: READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/988,273
FILING DATE: 19921214
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: BENT, Stephen A.
REGISTRATION NUMBER: 29,768
REGISTRATION NUMBER: 29,768
REFERENCE/POCKET NUMBER: 40399/182 NIHD
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202)672-5300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
                                                                                                                                                                                                      0; Mismatches
PRIOR APPLICATION NUMBER: 60/095,938
PRIOR FILING DATE: 1998-08-10
NUMBER OF SEQ ID NOS: 11
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 8
LENGTH: 87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 46;
Pred. No. (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                88.5%;
90.0%;
                                                                                                                                                                     88.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               : 117 amino acids
AMINO ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (202) 672-5399
                                                                                                                                                       Query Match
Best Local Similarity 90.v
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEX: 904136
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Washington, D.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               63 VHCQAGISRS 72
                                                                                                                                                                                                                                       1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                    34 VHCQAGISRS 43
                                                                                                                     ; ORGANISM: Homo sapiens
US-09-371-671B-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY: USA
ZIP: 20007-5109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-07-988-273-4
                                                                                                         TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠ
                                                                                                                                                                                                                                         ð
```

; Sequence 4, Application PC/TUS9312019

PCT-US93-12019-4

```
ő
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 46; DB 4; Length 154; Pred. No. 0.25; 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 5; Length 117;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-955-732A-7

US-955-732A-7

Sequence 7, Application US/09955732A

Patent No. 6825021

GENERAL INFORMATION:

APPLICANT: Luche, Ralf M.

APPLICANT: Wei, Bo

TITLE OF INVENTION: DSP-15 DUAL-SPECIFICITY PHOSPHATASE

TILE REFERENCE: 200125-433

CURRENT FILING DATE: 2001-09-18

NUMBER OF SEQ ID NOS: 29

SOFTWARE FastSEQ for Windows Version 4.0

SEQ ID NO 7

LENGTH: 154

TYPE: PRT

ORGANISM: Home sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           'Sequence 8, Application US/09955732A

'Sequence 8. Application US/09955732A

'Batent No. 6825021

'GENERAL INCRMATION:

'APPLICANT: Luche, Ralf M.

'TITLE OF INVENITION: DSP-15 DUAL-SPECIFICITY PHOSPHATASE

'TITLE REPEBENCE: 200125.433

'CURRENT APPLICATION NUMBER: US/09/955,732A

'CURRENT FILING DATE: 2010-09-18

'NUMBER OF SEQ ID NOS: 29

'SOFTWARE: FASESEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1; Indels
TITLE OF INVENTION: EXPRESSION CLONING OF A HUMAN TITLE OF INVENTION: PHOSPHATASE NUMBER OF SEQUENCES: 7
COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk COMPUTER: IBM PC Compatible COMPUTER: IBM PC Compatible COMPUTER: PATEMER: PC-COMPATE: PRIOR APPLICATION NUMBER: US 07/988,273 FILING DATE: 14-DEC-1992 INFORMATION FOR SEQ ID NO: 4: SEQUENCE CHARACTER STICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 46; DB 5,
Pred. No. 0.18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               88.5%;
90.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    88.5%;
90.0%;
                                                                                                                                                                                                                                                                                                                                                              LENGTH: 117 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ouery Match
Best Local Similarity 90.v.
Best Local Similarity
91.v.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         95 VHCOAGISKS 104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          63 VHCQAGISRS 72
                                                                                                                                                                                                                                                                                                                                                                                    TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity
Matches 9; Conserv
```

Gaps

```
;
0
                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            88.5%; Score 46; DB 4; Length 168; 90.0%; Pred. No. 0.27; 1: Indels iive 0; Mismatches 1; Indels
; Sequence 16, Application US/09557921
; Patent No. 6551810
; GENERAL INOFMATION:
   APPLICANT: Luche, Ralf M.
; APPLICANT: Luche, Ralf M.
; APPLICANT: Wel, B. DSP-10 DUAL-SPECIFICITY PHOSPHATASE
; FILE OF INVENTION: D. DSP-10 DUAL-SPECIFICITY PHOSPHATASE
; CURRENT APPLICATION NUMBER: US/09/557,921
; CURRENT FILING DATE: 200-04-20
; NUMBER OF SEQ ID NOS: 20
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 16
; LENGTH: 168
                                                                                                                                                                                                                                                                                                                                            88.5%; Score 46; DB 4; Length 168; 90.0%; Pred. No. 0.27; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17, Application US/09619380

Sequence 17, Application US/09619380

Batent No. 6649391

GENERAL INFORMATION:

APPLICANT: Luche, Ralf M.

TITLE OF INVENTION: DSP-11 DUAL SPECIFICITY PHOSPHATASE

FILE REFERENCE: 200125.418

CURRENT APPLICANT: NUMBER: US/09/619,380

CURRENT PELLING DATE: 2000-07-19

NUMBER OF SEQ ID NOS: 22

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 17

LENTH: 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 18, Application US/09564357
Fatent No. 6645753
GENERAL INFORMATION:
APPLICANT: Luche, Ralf M.
TITLE OF INVENTION: DSP-5 DUAL-SPECIFICITY PHOSPHATASE
TITLE REFERENCE: 200125,413
CURRENT APPLICATION NUMBER: US/09/564,357
CURRENT FILING DATE: 2000-04-24
NUMBER OF SEQ ID NOS: 22
SOFTWARE: FateSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity 90.0
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity 90.0
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                              109 VHCQAGISRS 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                109 VHCQAGISRS 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                             1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                   TYPE: PRT
ORGANISM: Homo sapiens
US-09-557-921-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
; ORGANISM: Homo sapiens
US-09-564-357-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-619-380-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 41
US-09-619-380-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 40
US-09-564-357-18
                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                    ö
                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                    ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        88.5%; Score 46; DB 4; Length 154; 90.0%; Pred. No. 0.25; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    88.5%; Score 46; DB 4; Length 168; 90.0%; Pred. No. 0.27; ive 0; Mismatches 1; Indels
                                                                                                                          Length 154;
                                                                                                                                                                                                                                                                                                      RESULT 37
US-09-55-732A-9
i Sequence 9, Application US/09955732A
i Sequence 9, Application US/09955732A
i GENERAL INFORMATION:
i APPLICANT: Wei, Bo
TITLE OF INVENTION: 108-15 US.
i TILE OF INVENTION: 108-15 US.
i CURRENT PAPLICATION NUMBER: US/09/955,732A
i CURRENT FILING DATE: 2001-09-18
i NUMBER OF SEQ ID NOS: 29
i SOFTWARE: FastSEQ for Windows Version 4.0
i LENGTH: 154
i TYPE: PRT
i ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INTORMATION:
APPLICANT: Luche, Ralf M.
APPLICANT: Wei, Bo.
TITLE OF INVENTION:
CURRENT APPLICATION NUMBER: US/09/544,716
CURRENT APPLICATION NUMBER: US/09/544,716
NUMBER OF SEQ ID NOS: 200
NUMBER OF SEQ ID NOS: 200
SEQ ID NO 15
LENGTH: 168
                                                                                                                                                                    1; Indels
                                                                                                                            DB 4;
                                                                                                                            Score 46; DB 4. Pred. No. 0.25; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 38
18-09-544-716-15
Sequence 15, Application US/09544716
Patent No. 6492157
                                                                                                                            88.5%;
                                                                                                                          Query Match 88.5
Best Local Similarity 90.0
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 90.0
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 90.0
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    109 VHCQAGISRS 118
                                                                                                                                                                                                                                  ||| ||||||
95 VHCQAGISRS 104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                95 VHCQAGISRS 104
                                                                                                                                                                                                           1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 VHCLAGISRS 10
      SEQ ID NO 8
LENGTH: 154
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
ORGANISM: Homo sapiens
US-09-544-716-15
                                                                                     US-09-955-732A-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-955-732A-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 39
US-09-557-921-16
```

g

ö

Gaps

```
Search completed: August 31, 2005, 11:11:30 Job time : 45 secs
                                                                                                                                                                                                                                                                                                                                                                                            ; Sequence 18, Application US/09557921; Patent No. 6551810
                                                                                                                                                                                             88.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 90.0
Matches 9; Conservative
                                                                                                                                                                                           Query Match
Best Local Similarity 90.0
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            109 VHCQAGISRS 118
                                                                                                                                                                                                                                                                                                      109 VHCQAGISRS 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                  1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                      TYPE: PRT
CORGANISM: Homo sapiens
US-09-557-921-17
                                                                                                                                                                                                                                                                                                                                                           RESULT 45
US-09-557-921-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-557-921-18
                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ô
                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                       ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      88.5%; Score 46; DB 4; Length 169; 90.0%; Pred. No. 0.27; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 4; Length 169; 0.27;
Score 46; DB 4; Length 168;
Pred. No. 0.27;
                                                                                                                                                                                     Sequence 16, Application US/09544716
Sequence 16, Application US/09544716
Sequence 16, Application US/09544716
GENERAL INFORMATION:
APPLICANT: Luche, Ralf M.
TITLE OF INVENTION: DSP-9 DUAL-SPECIFICITY PHOSPHATASE
TITLE OF INVENTION: DSP-9 DUAL-SPECIFICITY PHOSPHATASE
CURRENT APPLICANT: Weil, Bo
CURRENT APPLICATION NUMBER: US/09/544,716
CURRENT FILING DATE: 2000-04-10
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 16
LEAGTH: 169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 17, Application US/09544716
Fatent No. 6492157
GENERAL INFORMATION:
APPLICANT: Luche, Ralf M.
TITLE OF INVENTION: DSP-9 DUAL-SPECIFICITY PHOSPHATASE
FILE REFERENCE: 200125.415
CURRENT APPLICATION NUMBER: US/09/544,716
CURRENT PILING DATE: 200-04-10
NUMBER OF SEQ ID NOS: 20
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 17
LEAR OF THE NOS IN THE NUMBER: TEATH NUMBER OF SEQ ID NOS: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1; Indels
                                     1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
A APPLICANT: Luche, Ralf M.
A APPLICANT: Wei, Bo.
TITLE OF INVENTION: DSP-10 DUAL-SPECIFICITY PHOSPHATASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             88.5%; Score 46; DB 90.0%; Pred. No. 0.27 tive 0; Mismatches
                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; Sequence 17, Application US/09557921
; Patent No. 6551810
88.5%;
90.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 90.0
Matches 9; Conservative
 Query Match
Best Local Similarity 90.0
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 90.0
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      109 VHCQAGISRS 118
                                                                                                     109 VHCQAGISRS 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      109 VHCQAGISRS 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 VHCLAGISRS 10
                                                                           1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                     CRGANISM: Homo sapiens US-09-544-716-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 44
US-09-557-921-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 43
US-09-544-716-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-544-716-17
                                                                                                                                                                                    US-09-544-716-16
                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
                                                                                                                                                             RESULT 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                            δ
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                          ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                88.5%; Score 46; DB 4; Length 169; 90.0%; Pred. No. 0.27; 1; Indels iive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                         Score 46; DB 4; Length 169;
Pred. No. 0.27;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:

APPLICANT: Luche, Ralf M.
APPLICANT: Wei, Ba
TITLE OF INVENTION: DSP-10 DUAL-SPECIFICITY PHOSPHATASE
FILE REFERENCE: 200125.416
CURRENT FAPLICATION NUMBER: US/09/557,921
CURRENT FILING DATE: 2000-04-20
NUMBER OF SEQ ID NOS: 20
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 18
LENGTH: 169
FILE REFERENCE: 200125.416
CURRENT APPLICATION NUMBER: US/09/557,921
CURRENT FILING DATE: 2000-04-20
NUMBER OF SEQ ID NOS: 20
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 17
LENGTH: 169
```

This Page Blank (uspto)

Title: Perfect score:

Run on:

Sequence:

Scoring table:

DB DB

Minimum Maximum Maximum

```
Sequence 803, App
Sequence 801, App
Sequence 802, App
Sequence 825, App
Sequence 826, App
Sequence 804, App
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 MetLeuProleuSerLeuGlnThrValPheSerLeuTyrPheTrpValAsnTrpArgArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DUAL SPECIFICITY
AND USES THEREFOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative:
Mismatches:
Indels:
 US-09-658-824-803
US-09-736-458
US-09-736-458
US-09-614-124B-801
US-09-658-814-801
US-09-658-814-801
US-09-658-824-801
US-09-658-824-801
US-09-658-824-801
US-09-674-124B-825
US-09-674-124B-825
US-09-674-124B-825
US-09-736-475-825
US-09-736-775-826
US-09-736-775-826
US-09-736-776-826
US-09-761-124B-826
US-09-761-124B-826
US-09-761-124B-826
US-09-658-824-826
US-09-658-824-804
US-09-919-471-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-964-277-21 (1-517) x US-09-816-494-3 (1-1998)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Patent No. 6664089;
SENERAL-HERORAPTON:
SENERAL-HERORAPTON:
TITLE OF INVENTION: PHOSPHATASE MOLECULES AND TITLE OF INVENTION: PHOSPHATASE MOLECULES AND FILE REFERENCE: 10448-03002
CURRENT FILING DATE: 2001-03-23
PRIOR APPLICATION NUMBER: US 60/191,858
PRIOR APPLICATION NUMBER: 2001-03-24
NUMBER OF SEQ ID NOS: 10
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 3
LENGTH: 1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             7.16e-257
2606.00
90.21%
90.21%
97.68%
      ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
      Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 1
US-09-816-494-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-816-494-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pred. No.:
       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Command line parameters:
-MODEL=frame+ p2n.model - DEV=xlh
-Q=/Cgn2_1/USPTO_spool/USO996427/runat_31082005_120238_8492/app_query.fasta_1.711
-Q=/Cgn2_1/USPTO_spool/USO9964277/runat_31082005_120238_6492/app_query.fasta_1.711
-DB=Issued Patents NA -QFMT=fastap -SUPFIX=rni -MINMATCH=0.1 -LOOPCL=0
-LOOPEXT=0 - UNITS=Dits -STRAT=1 - END=-1 - MATRIX=Dlosum62 - TRANS=human40.cdi
-LIST=45 - DOCALIGN=200 - THR_SCORE=pct - THR_NAX=100 - THR_MIN=0 - ALIGN=15
-USPR=-USO9964277_@CGN 1 1 69 @runat_31082005_120238_8492 - NOFU=6 - ICPU=3
-NO MAAP - LARGEQUERY - NGG SCORE=0 - WAIT - DSPBLOCK=100 - LONGLOG
-DEV TREDUT=120 - WARN TIMEOUT=30 - THRADS=1 - XGAPOP=10 - XGAPEXT=0.5 - FGAPOP=6
-FGAPEXT=7 - YGAPOP=10 - YGAPEXT=0.5 - DELOP=6 - DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 3, Appli
Sequence 1, Appli
Sequence 3, Appli
Sequence 3250, Ap
Sequence 14992, A
Sequence 4617, Ap
Sequence 803, Appli
Sequence 803, App
                                                                                                           September 1, 2005, 02:14:01; Search time 379 Seconds (without alignments) 2232.071 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Description
                                                                                                                                                                                                    ........LGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1: /cgn2 6/ptodata/1/ina/5A_COMB.seq:*
2: /cgn2_6/ptodata/1/ina/5B_COMB.seq:*
3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
6: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
                       GenCore version 5.1.6
(c) 1993 - 2005 Compugen Ltd
                                                                                  OM protein - nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-816-494-3
US-09-916-668-3
US-09-949-016-3250
US-09-949-016-14992
US-09-949-016-14992
US-09-949-016-14992
US-09-922-146-3
US-09-702-705-803
US-09-736-457-803
US-09-671-124B-803
US-09-671-325-803
US-09-671-325-803
                                                                                                                                                                                                                                                                                                                                                           Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                1202784 seqs, 818138359 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                      Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                   0.5
7.0
7.0
                                                                                                                                                                                                                                                 Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
                                                                                                                                                                                                       1 MLPLSLQTVFSLYFWVNWRR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Issued_Patents_NA:*
                                                                                                                                                                                                                                                                                                                                                                                           seq length: 0
seq length: 200000000
                                                                                                                                                                         US-09-964-277-21
2668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1998
3544
2377
2377
13782
2283
2283
1238
1238
1238
1238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                      BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97.7
997.7
331.6
227.8
111.5
110.9
110.9
```

Sequence 10, Sequence Sequence

Sequence

29

21 AlaSerThrLeuPheThrCysLeuGln-----

유

Score

Result No.

Database

à

```
Sequence 3, Application US/09920668

Sequence 3, Application US/09920668

Batent No. 6482644

GENERAL INFORMATION:
APPLICANT: Lax M. Cowsert
APPLICANT: Lax M. Cowsert
APPLICANT: Brett P. Monia
TITLE OF INVENTION: ANTISENSE MODULATION OF DUAL SPECIFIC PHOSPHATASE 8 EXPRESSION FILE REPERENCE: RTS-0246
CURRENT APPLICATION NUMBER: US/09/920,668
CURRENT FILING DATE: 2001-08-01
NUMBER OF SEQ ID NOS: 49
                                                                                                                                                                                                                                             2427
                                                                                                                                                                                                                                                                               2487
                                                                                                    2187
                                                                                                                                      2247
                                                                                                                                                                        2307
                                                                                                                                                                                                           2367
                                                                                    382
                                                                                                                      405
                                                                                                                                                       425
                                                                                                                                                                                         HisGluGluSerProPheGluLysGlnPheLysArgArgSerCysGlnMetGluPheGly
                                                                                                                                                                                                                                                                       1948 CAGACTCCCGAAACCAGTCCTGATAAGGAGGAAGCCAGCATCCCCCAAGAAGCTGCAGACC
                                                   ThralaGlnArgSerLeuLeuSerProLeuHisArgSerGlySerValGluAspAsnTyr
                                                                                                                      LeuGlyLeuLysGlyTrpHisSerAsplleLeuAlaProGlnThrSerThrProSerLeu
                                                                                                                                      creseccritaaesecrescacressararcritescececasaccreracecritecers
                                                                                                                                                        ThrSerSerTrpTyrPheAlaThrGluSerSerHisPheTyrSerAlaSerAlaIleTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2377
216
59
142
102
                                                                                                                                                                                                                                                                                                                                    517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                    SerPheSerGlySerMetGlulleIleGluValSer
                                                                                                                                                                                                                                                                                                                                            US-09-964-277-21 (1-517) x US-09-920-668-3 (1-2377)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6.82e-76
844.00
52.99%
41.62%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ... (2012)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (135)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: CDS
LOCATION: (139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 2377
                                                                                                                                                                                                                                                                                                                                                                      RESULT 3
US-09-920-668-3
                                                   346
                                                                     2068
                                                                                                                                                                           2248
                                                                                                                                                                                                              2308
                                                                                                                                                                                                                                               2368
                                                                                                                                                                                                                                                                                  2428
                                                                                                       2128
                                                                                                                                        2188
                                                                                                                                                                                                                                446
                                                                                                                                                                                                                                                                 466
                                                                                                                                                                                                                                                                                                                                     206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQ ID NO 3
                                                                                                                       386
                                                                                                                                                          406
                                                                                                                                                                                            426
                                                                                      366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Sc
Pred. No.:
Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match:
                               d
                                                               g
                                                                                  8 8 8
                                                                                                                                   요 당
                                                                                                                                                                     a y
                                                                                                                                                                                                          엄
                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                            q
                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                                                                                                                                    셤
             Š
                                              Š
                                                                                                                                                                                                                                                                                           1407
                                                                                                                                                                                                                                                                                                                             1467
                                                                                                                                                                                                                                                                                                                                                                                                 1587
                                                                                                                                                                                                                                                                                                                                                                                                                                    1647
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1707
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1827
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1887
                                                                                                                                                                                    1227
                                                                                                                                                                                                                       1287
                                                                                                                                                                                                                                                       rrageresearcreceeredseeded 1347
                                                                                                                                                                                                                                                                                                                                                       1947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         265
                                                                              GGCCTCTGTGAAGGAAATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCT 1047
                                                                                                                1048 GTTGCCAACATTGGGCCAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGAT 1107
                                                                                                                                                                                                                                                                                                                                              165
                                                                                                                                                                                                                                                                                                                                                                                 185
                                                                                                                                                                                                                                                                                                                                                                                                                  205
                                                                                                                                                                                                                                                                                                                                                                                                                                                     225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 325
                                                                                                                                                                                                                                       105
                                                                                                                                                                                                                                                                           125
                                                                                                                                                                                                                                                                                                           145
                                            987
                                                                                                                                                                    65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATCGCTATCGCCTACATCATGAAGAGGATGGACATGTCTTTAGATGAAGCTTTACATTT
                                                                                                                                                                                                                                                                                                                       GTGAAAGAAAAAAGACCTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGAC
                                                                                                                                                                                                                                                                                                                                                                                GluThrProLeuSerProProCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ProvalHisProAlaSerValProSerValProSerValGlnProSerLeuLeuGluAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SerProLeuValGlnAlaLeuSerGlyLeuHisLeuSerAlaAspArgLeuGluAspSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VallysGlulysArgProThr1leSerProAsnPheAsnPheLeuGlyGluLeuLeuAsp
                                                                                                                                                                                                                                                                                                                                              TyrGluLysLysIleLysAsnGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeu
 ------GluLeuMetGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerAsn
                                                                                                                                          1108 GTCCTCAACAAGGAGCTGATGCAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAAT
                                                                                                                                                                                                     SerPheCysGluLysIleLeuProTrpLeuAspLysSerValAspPheIleGluLysAla
                                                                                                                                                                                                                                                   AAAGCCTCCAATGGATGTGTTCT
                                                                                                                                                                                       1168
                                                                                                                                                                                                                         1228
                                                                                                                                                                                                                                                                            106
                                                                                                                                                                                                                                                                                             1348
                                                                                                                                                                                                                                                                                                                               1408
                                                                                                                                                                                                                                                                                                                                                                 1468
                                                                                                                                                                                                                                                                                                                                                                                                   1528
                                                                                                                                                                                                                                                                                                                                                                                                                                       1588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   306
                                                                                988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              266
                                                                                                                                   30
                                                                                                                                                                      46
                                                                                                                                                                                                        99
                                                                                                                                                                                                                                           86
                                                                                                                                                                                                                                                                                                              126
                                                                                                                                                                                                                                                                                                                                                 146
                                                                                                                                                                                                                                                                                                                                                                                   166
                                                                                                                                                                                                                                                                                                                                                                                                                      186
                                                                                                                                                                                                                                                                                                                                                                                                                                                        206
                             23
                                                               29
```

445

465

д

ò a b

8 B 8

a

g

ò

엄 ò

ઠ

셤

ð

g

g

8

g

ሯ

8 8

ò g 8 8

જે 셤 8 요 8 6 ⋧ 셤

485

g

셤

셤 ઠે

ઠે

g ò g

ò

g

ઠ

g

ઠે

g

ò

셤

δ

g ò 셤 à

ò

```
SerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr11eSerProAsnPhe 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMetLysArgMetAspMet 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   158 GlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProAsnGluProValProAla 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     :::
GTCACCCCCAACCTCCCAAACTTCTTCGAGAAGAATGGTGACTTT-------CAC 866
                                                                                                                                                                                                                                                                                                                                                                                                          21
                                                                                                                                                                                                                      43 AlaSerAsnThrCysPro-------LysProAspPhelleProGluSerHis
                                                                                                                                                                                                                                                                                                                                                                                       58 PheLeuArgValProValAsnAspSerPheCysGluLysIleLeuProTrpLeuAspLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                    78 ServalAspPheIleGluLysAlaLysAlaSerAsnGlyCysValLeuValHisCysLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 178 ValSerGluGlyGlyGlnLysSerGluThrProLeuSerPro------Pro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1176 --- GGCAGTGGGGGAGGGATCTGCGGCCTCCAACCGGCCTCCTTCTTCACCACCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           193 CysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProVal-----HisProAla
                                                                                                                                                                                                                                                             23 ThrLeuPheThrCysLeuGlnGluLeuMetGlnGlnAsnGlyIleGlyTyrValLeuAsn
                                                                                                                                                                                                   3 ProLeuSerLeuGlnThrValPheSerLeuTyrPheTrpValAsnTrpArgAlaSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2303
74
46
77
34
                                                            Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1293 CCTGCCCCACCCCACGGTGTCCCTGCC 1325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          211 SerValProSerValProSerValGlnProSer 221
                                                                                                                                                                      US-09-964-277-21 (1-517) x US-09-922-146-3 (1-2303)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-702-705-803
; Sequence 803, Application US/09702705
; Patent No. 6504010
; GENERAL INFORMATION:
; APPLICANT: Wang, Tongtong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Wang, Tongtong
Bangur, Chaltenya S.
Lodes, Michael A.
Fanger, Gary
Vedvick, Tom
Carter, Darrick
Retter, Marc
                                                         6.64e-21
308.00
51.95$
32.03$
   LOCATION: (114)...(1268)
                                                                                                           Best Local Similarity:
                                                                                           Percent Similarity:
                                                Alignment Scores:
Pred. No.:
                 US-09-922-146-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                            819
                                                                                                                           Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                     à
                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                           유
                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Lex M. Cowsert
APPLICANT: Lex M. Cowsert
APPLICANT: Brett P. Monia
TITLE OF INVENTION: ANTISENSE MODULATION OF DUAL SPECIFIC PHOSPHATASE 9 EXPRESSION
FILE REPERENCE: RTS-0252
CURRENT APPLICATION NUMBER: US/09/922,146
CURRENT PILING DATE: 2001-08-01
NUMBER OF SEQ ID NOS: 48
LENGTH: 2303
                                                                                                                                                                                                                                                                                                                                                                                                                                        --- Gacagradadadadadarici gegeerecaa eccedederect retreaceaeded 1232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsnGlnThrGlyAlaSer 157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      193 CysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProVal-----HisProAla 210
                                                                                                                                                                                                                                                                                                                                                            AlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMetLysArgMetAspMet 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              158 GlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProAsnGluProValProAla 177
                                                                                                                                                                                          23 ThrLeuPheThrCysLeuGlnGluLeuMetGlnGlnAsnGlyIleGlyTyrValleuAsn 42
                                                                                                             22
                                                                                                                                                                                                                                     43 AlaSerAsnThrCysPro------LysProAspPheIleProGluSerHis 57
                                                                                                                                                                                                                                                                                                  58 PheLeuArgValProValAsnAspSerPheCysGluLysIleLeuProTrpLeuAspLys 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SerieuAspGluAlaTyrArgPheValLysGluLysArgProThrIleSerProAsnPhe
                                                                                                             3 ProLeuSerLeuGlnThrValPheSerLeuTyrPheTrpValAsnTrpArgArgAlaSer
                                                                                                                                        ccaereagachecagarcchrocorgrocagarccrecccaaccronarcragacher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  178 ValSerGluGlyGlyGlnLysSerGluThrProLeuSerPro---
        46
77
34
6
                                                                                US-09-964-277-21 (1-517) x US-09-949-016-4617 (1-2283)
    Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1293 CCTGCCCACCCCACCCACGGGTGTCCCTGCC 1325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     211 SerValProSerValProSerValGlnProSer 221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 7
US-09-922-146-3
; Sequence 3, Application US/09922146
; Patent No. 6566133
; GENERAL INFORMATION:
    51.95%
32.03%
11.54%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
ORGANISM: Homo sapiens
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1176
                                                                                                                                                                                                                                                                                                                                                                                                                          86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       118
```

...

```
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                           Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1164 TCCGTGGGCGTGCACTCGGCCCCCCAGCAGCCTGCCTACCTG-----CACAGCCCCATC 1217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1050 CAGGTGCTGGCCACGTCCTGTGCTGCAGGCTGCTAGC--------- 1088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    125 GCCACCCCC------ACCTCGCAGTTCGTCTTCAGCTTTCGGGTC--- 1163
                                                                                                                                                                                                                                                                                                                                                                                                     752
                                                                                                                                                                                                                                                                                                                                                                                                                                                  810 GCCGACATCAGCTCCTGGTTCATGGAAGCCATAGAGTACATCGATGCCGTGAAGGACTGC 869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  89 AsnGlyCysValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIle 108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            870 CGTGGGCGCGTGCTGCACTGCCAGGCGGCATCTCGCGGTCGGCCATCTGCCTG 929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              109 AlaTyrileMetLysArgMetAspMetSerieuAspGluAlaTyrArgPheValLysGlu 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             129 LysargProThrileSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLys 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               149 LyslleLysAsnGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeu 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                189 LeuSerProProCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHis 208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          209 ProAlaSerValProSerValProSerValGlnProSerLeuLeuGluAspSerProLeu 228
                                                                                                                                                                                                                                                                                                                                                                                                                                  68
                                                                                                                                                                                                                                                                                                                                                                           48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       169 GluLysProAsnGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1089 -----CCCTCGGGACCCCTG---------GGGGGGGGGAGCGCCC
                                                                                                                                                                                                                                                                                                                                                                         29 GlnGluLeuMetGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerAsnThrCysPro
                                                                                                                                                                                                                                                                                                                                                                                          49 LysProAspPhelleProGluSerHisPheLeuArgValProValAsnAspSerPheCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            69 GluLysIleLeuProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSer
                                   THE THERAPY
                                                                                                                                                                                                                                       1238
72
39
69
25
6
APPLICANT: Mannion, Jane
APPLICANT: Fan, Liqun
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.478C14
CURRENT APPLICATION NUMBER: US/09/702,705
CURRENT FILING DATE: 2000-10-30
NUMBER OF SEQ ID NOS: 1833
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 803
LENGTH: 1238
                                                                                                                                                                                                                                                                                                                                            US-09-964-277-21 (1-517) x US-09-702-705-803 (1-1238)
                                                                                                                                                                                                                                                                    Conservative:
                                                                                                                                                                                                                                                                                  Mismatches:
Indels:
                                                                                                                                                                                                                                         Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 803, Application US/09736457
Patent No. 6509448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ::: |||
|1218 ACCACCTCTCCCAGC 1232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    229 ValGlnAlaLeuSer 233
                                                                                                                                                                                                                                      1.73e-19
289.50
54.15%
35.12%
                                                                                                                                                                 TYPE: DNA
ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                     Best Local Similarity:
                                                                                                                                                                                                                                                                      Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 9
US-09-736-457-803
                                                                                                                                                                                                US-09-702-705-803
                                                                                                                                                                                                                           Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                 Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ਨੇ
                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                        요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
```

```
1164 TCCGTGGGGGTGCACCCCCAGCAGCTGCCTACCTG-----CACAGCCCCATC 1217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1125 GCCACCCCC-------ACCTCGCAGTTCGTCTTCAGCTTTCCGGTC--- 1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    752
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     89 AsnGlyCysValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIle 108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ||||||||:::|||| ::: ::: |||||||||:::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LysArgProThr1leSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLys 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             149 LysilelysAsnGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeu 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               169 GluLysProAsnGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrPro 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               189 LeuSerProProCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHis 208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               209 ProAlaServalProSerValProSerValGlnProSerLeuLeuGluAspSerProLeu 228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 109 AlaTyrIleMetLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29 GlnGluLeuMetGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerAsnThrCysPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             49 LysProAspPhelleProGluSerHisPheLeuArgValProValAsnAspSerPheCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             69 GluLysIleLeuProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    870 ceredececerecióciocióciócióccaciócióciócióciócióciócióciócióniciocoro
                                                                                                                                                                                                             FOR THE THERAPY AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1050 CAGGTGCTGGCCACGTCCTGTGCTGCGGAGGCTGCTAGC-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1238
72
39
69
25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-964-277-21 (1-517) x US-09-736-457-803 (1-1238)
                                                            APPLICANT: Fanger, Gary
APPLICANT: Vedvick, Tom
APPLICANT: Carter, Darrick
APPLICANT: Retter, Marc
APPLICANT: Renter, Marc
APPLICANT: Fan, Liqun
APPLICANT: Fan, Liqun
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR
TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
TITLE OF SOFTWEE: 20021.478015
CURRENT FILING DATE: 2000-12-13
CURRENT FILING DATE: 2000-12-13
SOFTWEEN: FastSEQ for Windows Version 3.0
SEQ ID NO 803
                       ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.73e-19
289.50
54.15%
35.12%
Wang, Tongtong
Bangur, Chaitanya
Lodes, Michael A.
                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-736-457-803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alignment Scores:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
```

셤 à

```
-----Accrescaerresrerresserressive--- 1163
                                                                          1164 TCCGTGGGCGTGCACTCGGCCCCCAGCTGCCTG-----CACAGCCCCATC 1217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ||||||||:::||| ::: ::: ||||||||:::
930 GCCTACCTGATGAAGAAACGGGTGAGGCTGGAGGAGGCCTTCGAGTTCGTTAAGCAG 989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       :::|||||| |||:::
753 AAC---CACTTTGAAGGACACTATGAGTACAAGTGCATCCCAGTGGAAGATAACCACAAG 809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 89 AsnGlyCysValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIle 108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              189 LeuSerProProCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHis 208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    49 LysProAspPhelleProGluSerHisPheLeuArgValProValAsnAspSerPheCys 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            69 GluLysileLeuProTrpLeuAspLysSerValAspPheileGluLysAlaLysAlaSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29 GlnGluLeuMetGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerAsnThrCysPro
                                                          209 ProAlaSerValProSerValProSerValGlnProSerLeuLeuGluAspSerProLeu
                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Fat, Liquin
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
FITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
FILE REPERENCE: 2.10.1.4786.12
CURRENT APPLICATION NUMBER: US/09/671,325
CURRENT FILING DATE: 2000-09-26
NUMBER OF SEQ ID NOS: 1825
SOFTWARE: FASELSEQ FOR Windows Version 3.0
SEQ ID NO 803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1238
72
39
69
25
6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-964-277-21 (1-517) x US-09-671-325-803 (1-1238)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length:
Matches:
                                                                                                                                                                                                     ; Sequence 803, Application US/09671325; Patent No. 6667154; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                  ŝ
                                                                                                                                              1218 ACCACCTCTCCCAGC 1232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.73e-19
289.50
54.15$
35.12$
                                                                                                                                                                                                                                                    Wang, Tongtong
Bangur, Chaitanya
Lodes, Michael A.
                                                                                                                                                                                                                                                                                               Fanger, Gary
Vedvick, Tom
Carter, Darrick
Retter, Marc
Mannion, Jane
                                                                                                                    229 ValGlnAlaLeuSer
                             1125 GCCACCCCC----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
                                                                                                                                                                                             US-09-671-325-803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-671-325-803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                                                                                                                                                              APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                 APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                             g
                                                              ð
                                                                                     g
                                                                                                                    8
                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           990 ceccecacarcarciceccaaciricaccircarececaciecieciecagricaagice 1049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  149 LyslleLysAsnGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeu 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      89 AsnGlyCysValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIle 108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ceresececerecrecrecrecrasecasecarcrecestresecatesecres 929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    109 AlaTyrIleMetLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGlu 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GluLysProAsnGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrPro 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   753 AAC---CACTTTGAAGGACACTATCAGTACAAGTGCATCCCAGTGGAAGATAACCACAAG 809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            752
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                69 GluLysileLeuProTrpLeuAspLysSerValAspPheileGluLysAlaLysAlaSer 88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 29 GlnGluLeuMetGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerAsnThrCysPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                49 LysProAspPhelleProGluSerHisPheLeuArgValProValAsnAspSerPheCys
                                                                                                1238
72
39
69
25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-964-277-21 (1-517) x US-09-614-124B-803 (1-1238)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                  1218 ACCACCTCTCCCAGC 1232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.73e-19
289.50
54.15%
35.12%
                      229 ValGlnAlaLeuSer 233
                                                                                                                                                                                                                                                                                                                                                                                                          r TYPE: DNA
COGANISM: Homo sapien
US-09-614-124B-803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
                                                                                             US-09-614-124B-803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match:
DB:
```

В

ઠે

음 ò g ò g ò 셤 ઠે g ò 8 ò

ò

752

88

```
1125 GCCACCCCC-------ACCTCGCAGTTCGTCTTCAGCTTTCCGGTC--- 1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   :::|||||| |||:::
753 AAC---CACTITGAAGGACACTATGAGTACAAGTGCATCCCAGTGGAAGATAACCACAAG 809
                                                                129 LysargProThrileSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLys 148
                                                                                                                                                         149 LyslleLysAsnGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeu 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GluLysIleLeuProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSer 88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LysProAspPheIleProGluSerHisPheLeuArgValProValAsnAspSerPheCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29 GlnGluLeuMetGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerAsnThrCysPro
189 LeuSerProProCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHis
                                                                                                                                                                                                                                                       169 GluLysProAsnGluProValProAlaValSerGluGlyGlyGlyGlnLysSerGluThrPro
                                                                                                                                                                                                                                                                                                                                                                                                                                           209 ProAlaSerValProSerValProSerValGlnProSerLeuLeuGluAspSerProLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FOR THERAPY AND
                                                                                                                                                                                             1238
72
39
69
25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-964-277-21 (1-517) x US-09-658-824-803 (1-1238)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Wang, Tongtong
APPLICANT: Bangur, Chaitanya S.
APPLICANT: Lodes, Michael A.
APPLICANT: Lodes, Michael A.
APPLICANT: Vedrick, Tom
APPLICANT: Vedrick, Tom
APPLICANT: Carter, Darrick
APPLICANT: Retter, Marc
APPLICANT: Retter, Marc
APPLICANT: Manion, Jane
APPLICANT: Fan, Liqun
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR
TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.478C11
CURRENT APPLICATION NUMBER: US/09/658,824
CURRENT FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 1788
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-658-824-803
; Sequence 803, Application US/09658824
; Patent No. 6746846
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1218 ACCACCTCTCCCÁGC 1232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      229 ValGlnAlaLeuSer 233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        289.50
54.15%
35.12%
10.85%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; TYPE: DNA
; ORGANISM: Homo sapien
US-09-658-824-803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       49
                                                                                                                                                                                                                                                                                                       1089
                          930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ..
8
                                                                                                                                                                                                                                                                                                                                                                                      염
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                         g
                                                                                                                                                                                             g
                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                              ò
                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                              LyslleLysAsnGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeu 168
                                                                                                                                                                                      189 LeuSerProProCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHis 208
                                                                                                                                                                                                                                                                                    209 ProAlaSerValProSerValProSerValGlnProSerLeuLeuGluAspSerProLeu 228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           109 AlaTyrIleMetLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGlu 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        49 LysProAspPhelleProGluSerHisPheLeuArgValProValAsnAspSerPheCys 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 69 GlulysileLeuProTrpLeuAspLysSerValAspPheileGluLysAlaLysAlaSer 88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   753 AAC---CACTTTGAAGGACACTATCAGTACAAGTGCATCCCAGTGGAAGATAACCACAAG
                                                                                                                               29 GlnGluLeuMetGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerAsnThrCysPro
                                                                                                169 GluLysProAsnGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FOR THERAPY AND
                                      1238
72
39
69
25
6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-964-277-21 (1-517) x US-09-589-184-803 (1-1238)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 803, Application US/09589184

Patent No. 668647

GENERAL INFORMATION:
GURRERT APPLICATION NUMBER:
GURRENT FILING DATE:
GURRER FERENCE 2000-06-05
NUMBER OF SEQ ID NOS:
SEQ ID NO SES 933

FENSION OF THE PROBLEM OF THE 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                              1218 ACCACCTCTCCCAGC 1232
                                                                                                                                                                                                                                                                                                                                                                             229 ValGlnAlaLeuSer 233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.73e-19
289.50
54.15%
35.12%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 12
US-09-589-184-803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-589-184-803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 1238
                                                                                                                                             1089
         149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                    g
                                                                                                                                                                                      ò
                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                g
                                                                                             ઠ
```

481

```
189 LeuSer-ProProCysAlaAspSerAlaThr----SerGluAlaAlaGlyGlnArgPr 206
                                                                                                                                ABDGIYCYSVALLeuVAlHisCysLeuAlaGlylleSerArgSerAlaThrileAlaile 108
                                                                                                                                                                                               AlaTyrileMetLysArgMetAspMetSerLeuAspGluAlaTyrArgPheVallysGlu 128
                                                                                                                                                                                                                                                              LysargProThrileSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLys 148
                                                                                                                                                                                                                                                                                                                              LyslleLysAsnGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeu 168
                                                                                                                                                                                                                                                                                                                                                                                                                                         GluLysProAsnGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrPro 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ovalHisProAlaSerValProSerValProSerValGlnProSerLeuLeuGluAspSe 226
                                                                                                                                                                                                                                                                                                                                                                                                                                                               365 AGAGACATGCTGGGCATCACGGCTCTGTTGAATGTCTCCTCGGACTGCCCA
                                               LysProAspPhelleProGluSerHisPheLeuArgValProValAsnAspSerPheCys
                                                                          425 AAC---CACTTTGAAGGACACTATCAGTACAAGTGCATGCCAGTGGAAGATAACCACAAG
                                                                                                               69 GluLys1leLeuProTrpLeuAspLysSerValAspPheileGluLysAlaLysAlaSer
                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Fan, Liqun
APPLICANT: Wang, Aijun
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.478C15
CURRENT APPLICATION NUMBER: US/09/736,457
CURRENT FILING DATE: 2000-12-13
NUMBER OF SEQ ID NOS: 1864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                            |||::: |||:::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            226 rProLeuValGlnAlaLeuSerGly 234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 900 -CCAGCTGTTAGAGCCGCCCTGGGG 923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 801, Application US/09736457
Patent No. 6509448
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Wang, Tongtong
Bangur, Chaitanya S.
Lodes, Michael A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5.05e-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Fanger, Gary
Vedvick, Tom
Carter, Darrick
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Retter, Marc
Mannion, Jane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-736-457-801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-736-457-801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                  83
                                                                                                                                                                                                                                                109
                                                                                                                                                                                                                                                                                                                                               662
                                                                                                                                                                                                                                                                                                                                                                                149
                                                                                                                                                                                                                                                                                                                                                                                                                                              169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              857
                                                    49
                                                                                                                                                                                                                                                                                                                 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 15
                                                                            8 B
                                                                                                                                         g
                                                                                                                                                                                à
                                                                                                                                                                                                         a
                                                                                                                                                                                                                                          õ
                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                            엄
                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠ
                                             ò
                                                                                                                                                                                                    1125 GCCACCCCC ---------ACCTCGCAGTTCGTCTTCAGCTTTCCGGTC--- 1163
                                                                                                                                                                                                                                                149 LyslleLysAsnGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeu 168
                                                                                                                                                                                                                                                                                                               169 GlutysproAsnGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrPro 188
                                                                                                                                       189 LeuSerProProCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHis 208
                                                                                                                                                                                                                                                                                                                                                                                                                                                209 ProAlaSerValProSerValProSerValGlnProSerLeuLeuGluAspSerProLeu 228
   109 AlaTyrileMetLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGlu 128
                                                                                                                                                                                  129 LysargProThrileSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLys 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GlnGluLeuMetGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerAsnThrCysPro 48
                                                    AsnGlyCysValleuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FOR THE THERAPY AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1619
73
42
69
25
6
                                                                                                                                                                                                                                                                                  1050 CAGGIGCIGGCCACGICCIGIGCGCAGGCTGCTAGC-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Retter, Marc
APPLICANT: Retter, Marc
APPLICANT: Mannion, Jane
APPLICANT: Fan, Lidun
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR
TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.478C14
CURRENT APPLICATION NUMBER: US/09/702,705
CURRENT FILING DATE: 2000-10-30
NUMBER OF SEQ ID NOS: 1833
SOFTWARE: FASTER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-964-277-21 (1-517) x US-09-702-705-801 (1-1619)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 801, Application US/09702705
Patent No. 6504010
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1218 ACCACCTCTCCCAGC 1232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5.05e-19
287.00
55.02%
34.93%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Wang, Tongtong
Bangur, Chaitanya
Lodes, Michael A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Wang, Tongtong APPLICANT: Bangur, Chaitanya APPLICANT: Lodes, Michael A. APPLICANT: Fanger, Gary APPLICANT: Vedvick, Tom APPLICANT: Retter, Marc APPLICANT: Mannion, Jane APPLICANT: Fan, Liqun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  229 ValGlnAlaLeuSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-702-705-801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-702-705-801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQ ID NO 801
                                                       89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match:
```

셤

셤

ò

g

ò

g ò

ò

8

ద ઠે

음 ઠે 셤 Š qq

δ

856

1619

8

796

```
196
                                                                                                                                                                                                                                                                                                                                                       856
                                                                                                                                                                   481
                                                                                                                                                129 LysArgProThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLys 148
                                                                                                                                                                                                                                             662 GGCGCAGCATTATCTCGCCCAACTTCAGCTTCATGGGGCAGCTGCTGCAGTTCGAGTCC 721
                                                                                                                                                                                                                                                                       149 LyslleLysAsnGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeu 168
                                                                                                                                                                                                                                                                                                       169 GluLysProAsnGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrPro 188
                                                                                                                                                                                                                                                                                                                                                                        206 ovalHisProAlaSerValProSerValProSerValGlnProSerLeuLeuGluAspSe 226
                                                                                                                                                                                                                                                                                                                                                                                 68
                                                                  29 GlnGluLeuMetGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerAsnThrCysPro 48
                                                                                                                                    69 GlulysileLeuProTrpLeuAspLysSerValAspPheileGlulysAlaLysAlaSer 88
                                                                                                 44.2
69
25
69
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                 US-09-964-277-21 (1-517) x US-09-736-457-801 (1-1619)
                                                                                                                                                                                                                                                                                                                                                                                                       226 rProLeuValGlnAlaLeuSerGly 234
                                                                                                                                                                                                                                                                                                                                                                                                                  -ccagcrgrragagccgcccrgggg 923
287.00
55.02%
34.93%
10.76%
       Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                 원
장
임
                                                                                                                                                               8 6 8 6
                                                                                                                                                                                                                                 8 & B &
                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                      8 B 8
                                                                                                                                                                                                                                                                                                                                                    а
                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                   ઠે
                                                                                  셤
                                                                                                  ò
```

Search completed: September 1, 2005, 11:43:04 Job time : 396 secs

e-

```
Sequence 16, Appl
Sequence 103, App
Sequence 114, App
Sequence 12, Appl
Sequence 114, App
Sequence 7, Appl
Sequence 8, Appli
Sequence 6, Appli
Sequence 7, Appli
Sequence 6, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                     August 31, 2005, 11:02:23 ; Search time 159 Seconds (without alignments) 24.712 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Published Applications AA:*

1: \cgn2_6/ptodata/2/pubpaa/VSOT PUBCOMB.pep:*

2: \cgn2_6/ptodata/2/pubpaa/PCT TRW PUB.pep:*

3: \cgn2_6/ptodata/2/pubpaa/NEW PUB.pep:*

4: \cgn2_6/ptodata/2/pubpaa/VSOT NEW PUB.pep:*

5: \cgn2_6/ptodata/2/pubpaa/VSOT NEW PUB.pep:*

6: \cgn2_6/ptodata/2/pubpaa/VSOT NEW PUB.pep:*

7: \cgn2_6/ptodata/2/pubpaa/VSOB NEW PUB.pep:*

8: \cgn2_6/ptodata/2/pubpaa/VSOB NEW PUB.pep:*

9: \cgn2_6/ptodata/2/pubpaa/VSOB NEW PUB.pep:*

10: \cgn2_6/ptodata/2/pubpaa/VSOB PUBCOMB.pep:*

11: \cgn2_6/ptodata/2/pubpaa/VSOB PUBCOMB.pep:*

12: \cgn2_6/ptodata/2/pubpaa/USOB PUBCOMB.pep:*

13: \cgn2_6/ptodata/2/pubpaa/USOB NEW PUB.pep:*

14: \cgn2_6/ptodata/2/pubpaa/USOB PUBCOMB.pep:*

15: \cgn2_6/ptodata/2/pubpaa/USOB PUBCOMB.pep:*

16: \cgn2_6/ptodata/2/pubpaa/USOB PUBCOMB.pep:*

16: \cgn2_6/ptodata/2/pubpaa/USOB PUBCOMB.pep:*

16: \cgn2_6/ptodata/2/pubpaa/USOB PUBCOMB.pep:*

17: \cgn2_6/ptodata/2/pubpaa/USOB PUBCOMB.pep:*

18: \cgn2_6/ptodata/2/pubpaa/USOB PUBCOMB.pep:*

19: \cgn2_6/ptodata/2/pubpaa/USOB PUBCOMB.pep:*

10: \cgn2_6/ptodata/2/pubpaa/USOB PUBCOMB.pep:*

10: \cgn2_6/ptodata/2/pubpaa/USOB PUBCOMB.pep:*

11: \cgn2_6/ptodata/2/pubpaa/USOB PUBCOMB.pep:*

12: \cgn2_6/ptodata/2/pubpaa/USOB PUBCOMB.pep:*

13: \cgn2_6/ptodata/2/pubpaa/USOB PUBCOMB.pep:*

14: \cgn2_6/ptodata/2/pubpaa/USOB PUBCOMB.pep:*

15: \cgn2_6/ptodata/2/pubpaa/USOB PUBCOMB.pep:*

16: \cgn2_6/ptodata/2/pubpaa/USOB PUBCOMB.pep:*

17: \cgn2_6/ptodata/2/pubpaa/USOB PUBCOMB.pep:*

18: \cgn2_6/ptodata/2/pubpaa/USOB PUBCOMB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1767149
GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-964-277-16

3 US-10-029-345A-103

3 US-10-029-345A-144

US-09-964-277-13

7 US-10-803-738-12

8 US-10-029-345A-134

7 US-10-039-738-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-964-277-6
US-09-964-277-7
US-09-955-732-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1767149 seqs, 392926209 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 100 summaries
                                                                                                          OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                     US-09-964-277-16
52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query
Match Length DB
                                                                                                                                                                                                                                                                                                                              1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    00.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                      Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Database :
                                                                                                                                                                                                                                                                                                                                Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Searched:
                                                                                                                                                                   Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
02
```

144 011121111111111111111111111111111111	
US-09-964-277-3 US-09-964-277-3 US-09-965-732-3 US-09-955-732-3 US-09-955-732-3 US-09-955-732-3 US-10-346-356-1 US-10-314-058-1 US-10-314-356-1 US-10-346-356-1 US-10-36-36-36-1	S US-10-343-357-7 S US-10-648-593-2 S US-10-648-593-2 S US-10-648-593-2 S US-10-648-593-2 S US-10-838-181-1 VS-10-838-181-1 US-10-029-345A-1 US-10-029-345A-1 US-10-029-345A-1 S US-10-029-345A-1 S US-10-03-345A-1 S
115.6 9 9 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	387000000000000000000000000000000000000
\$55.5 100.0 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	8 8 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
66 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	p

Gaps

; 0

```
100.0%; Score 52; DB 18; Length 23; 100.0%; Pred. No. 0.016; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 52; DB 18; Length 23; 100.0%; Pred. No. 0.016; Live 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 100.0%; Score 52; DB 9; Length 41; Best Local Similarity 100.0%; Pred. No. 0.029; Matches 10; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 13, Application US/09964277

Patent No. US20020137170A1

GENERAL INFORMATION:

APPLICANT: Luck, Ralf M.

APPLICANT: Wei, Bo

TITLE OF INVENTION: DSP-16 DUAL-SPECIFICITY PHOSPHATASE

FILE REFERENCE: 200125.434

CURRENT APPLICATION NUMBER: US/09/964,277

CURRENT FILING DATE: 2001-09-25

NOWBER OF SEQ ID NOS: 22

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 13

LENGTH: 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                            1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               6 VHCLAGISRS 15
                                                                                                                                                                                                                                                                                                                                                             6 VHCLAGISRS 15
; TYPE: PRT
; ORGANISM: homo sapiens
US-10-029-345A-103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Homo sapiens
                                                                                                                                        Query Match
Best Local Similarity
Matches 10; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-029-345A-144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 4
US-09-964-277-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-964-277-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ద
                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                    Sequence 19, Applisequence 5, Applisequence 5, Applisequence 25, Applisequence 10, Applisequence 25, Applisequence 1179, Applisequence 21179, Applisequence 2811, Applisequence 2811, Applisequence 2811, Applisequence 2811, Applisequence 429, Applisequence 429, Applisequence 429, Applisequence 429, Applisequence 429, Applisequence 429, Applisequence 430, 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
   Sequence 135, App
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WESULO 199-345A-103

Sequence 103, Application US/10029345A

Publication No. US20050130286A1

GENERAL INFORMATION:
APPLICANT: Bristol-Myers Squibb Company
FILE OF INVENTION: POLYMUCLEOTIDES ENCODING NOVEL HUMAN PHOSPHATASES
FILE REFERENCE: D0072.NP
CURRENT APPLICATION NUMBER: US/10/029,345A

CURRENT FILING DATE: 2001-12-20

PRIOR APPLICATION NUMBER: US 60/256,868

PRIOR APPLICATION NUMBER: US 60/280,186

PRIOR FILING DATE: 2001-03-30

PRIOR PLING DATE: 2001-05-01

PRIOR FILING DATE: 2001-05-01

PRIOR FILING DATE: 2001-06-05

PRIOR FILING DATE: 2001-06-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%; Score 52; DB 9; Length 10; 100.0%; Pred. No. 0.0071; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 16 Application US/09964277

Sequence No. US20020137170A1

GENERAL INFORMATION:
APPLICANT: Luche, Ralf M.
APPLICANT: Wei, Bo
TITLE OF INVENTION: DSP-16 DUAL-SPECIFICITY PHOSPHATASE
FILE REFERENCE: 200125.434

CURRENT FILING DATE: 2001-09-25

SOFTWARE FILING DATE: 2001-09-25

NUMBER OF SEQ ID NOS: 22

SOFTWARE: PASCED NOS: 22

SOFTWARE: PRACTH: 10

TYPE: PRT

TYPE: ACGANISM: Homo sapiens
                                     US-10-803-738-9

US-09-964-277-5

US-09-955-732-5

US-09-775-925-25

US-09-775-925-25

US-09-847-5194-10

US-10-962-126-25

US-10-10-962-126-25

US-10-10-226-115-1179
                                                                                                                                                                                                                                                                                                                                                                                                       US-10-287-806-2
US-10-264-237-2811
US-10-072-012-428
US-10-072-012-429
US-10-072-012-439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity 100
nes 10; Conservative
       140
11256
11556
11557
11577
1162
1184
1184
1184
1184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 VHCLAGISRS 10
       998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 3998.1. 39998.1. 39998.1. 39998.1. 39998.1. 39998.1. 3998.1. 3998.1. 3998.1. 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-964-277-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-964-277-16
           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
       g
```

ó

Gaps

ö

ö

. 0

ö

셤 ò

```
APPLICANT: Desimont, Dolling
APPLICANT: Chen, Alice
APPLICANT: Chen, Alice
APPLICANT: Chen, Alice
APPLICANT: Checic, Roland
APPLICANT: Ton, Tee-Hua
APPLICANT: Ton, Tee-Hua
APPLICANT: Ton, Guisheng
TITLE OF INVENTION: Phosphatases Which Activate Map Kinase Pathways
FILE REPERENCE: 99-383-B
CURRENT APPLICATION NUMBER: US/10/803,738
CURRENT PLING DATE: 2004-03-18
FRIOR APPLICATION NUMBER: US/09/665,819A
FRIOR APPLICATION NUMBER: US 60/155,068
FRIOR FILING DATE: 1999-09-21
NUMBER OF SEQ ID NOS: 27
SOFTWARE: PatentIn version 3.0
SEQ ID NO 7
LENGTH: 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Zhou, Guisheng
TITLE OF INVENTION: Phosphatases Which Activate Map Kinase Pathways
TITLE OF INVENTION: Phosphatases Which Activate Map Kinase Pathways
FILE REPERENCE: 99-301
CURRENT APPLICATION NUMBER: US/10/665,819A
CURRENT FILING DATE: 2004-03-18
PRIOR APPLICATION NUMBER: US/09/665,819A
PRIOR FILING DATE: 2006-09-21
PRIOR APPLICATION NUMBER: US 60/155,068
                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                     ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; OTHER INFORMATION: Description of Artificial Sequence: rMKP-3 US-10-803-738-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 100.0%; Score 52; DB 17; Length 141; Best Local Similarity 100.0%; Pred. No. 0.098; Matches 10; Conservative 0; Mismatches 0; Indels 0
                                     0; Indels
100.0%; Pred. No. 0.098; tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 8, Application US/10803738
Publication No. US20050014222A1
GENERAL INFORMATION:
APPLICANT: Belmont, John
APPLICANT: Fletcher, Frederick
APPLICANT: Chen, Alice
APPLICANT: Colicos, Suzanne
                                                                                                                                                                                                                                                                                                                                                                                        Sequence 7, Application US/10803738
Publication No. US20050014222A1
GENERAL INFORMATION:
APPLICANT: Belmont, John
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 VHCLAGISRS 10
                                                                                                                   1 VHCLAGISRS 10
                                                                                                                                                                 85 VHCLAGISRS 94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Artificial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-803-738-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                       à
                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-1U-US-1-91-94-1.94

| Sequence 134, Application US/10029345A
| Publication No. US20050130286A1
| GENERAL INFORMATION:
| TITLE OF INVERMATION:
| TITLE OF INVERMINEN: POLYNUCLEOTIDES ENCODING NOVEL HUMAN PHOSPHATASES
| FILE REFERENCE: D0072.NP
| CURRENT FALING DATE: 2001-12-20
| PRIOR APPLICATION NUMBER: US 60/256,868
| PRIOR FILING DATE: 2001-12-20
| PRIOR FILING DATE: 2001-03-30
| PRIOR FILING DATE: 2001-03-30
| PRIOR FILING DATE: 2001-03-30
| PRIOR FILING DATE: 2001-06-01
| PRIOR FILING DATE: 2001-06-05
| PRIOR FILING DATE: 2001-06-25
| NUMBER OF SEQ ID NOS: 208
| SOFTWARE: PATENTIN VERSION 3.0
                                                                                                                                    RESULT 5

US-10-803-738-12

US-10-803-738-12

Sequence 12, Application US/10803738

Publication No. US2050014222A1

GENERAL INFORMATION:

APPLICANT: Belmont, John

APPLICANT: Fletcher, Frederick

APPLICANT: Chen, Alice

APPLICANT: Tan, Tse-Hua

APPLICANT: Tan, Tse-Hua

APPLICANT: Tan, Use-Hua

APPLICANT: Tan, Use-Hua

APPLICANT: Chicos, Suzame

APPLICANT: Tan, Use-Hua

APPLICANT: Solou, Guisheng

TITLE OF INVENTION: Phosphatases Which Activate Map Kinase Pathways

FILE REFERENCE: 99-383-B

CURRENT APPLICATION NUMBER: US/10/803,738

CURRENT APPLICATION NUMBER: US/09/665,819A

PRIOR FILING DATE: 1999-09-21

NUMBER OF SEQ ID NOS: 27

SOFTWARE: Patentin version 3.0

SEQ ID NO 12

LENGTH: 140

TYPE: PRT

PRATURE:

PRATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 18; Length 140;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; Score 52; DB 17; Length 140; 100.0%; Pred. No. 0.098;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; OTHER INFORMATION: Description of Artificial Sequence: MH3/6
US-10-803-738-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 52;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 VHCLAGISRS 10
    VHCLAGISRS 10
                                                         11 VHCLAGISRS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-029-345A-134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-029-345A-134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQ ID NO 134
```

ð

Query Match

ö

ó

Gaps

.; 0

Length 155;

g

```
100.0%; Score 52; DB 9; Length 156; 100.0%; Pred. No. 0.11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Score 52; DB 9; Length 156; 100.0%; Pred. No. 0.11; cive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; Sequence 4, Application US/09964277;
; Patent No. US20020137170A1
; GENERAL INFORMATION:
; APPLICANT: Luche, Ralf M.
; APPLICANT: Luche, Ralf M.
; TITLE OF INVENTION: DSP-16 DUAL-SPECIFICITY PHOSPHATASE
; TITLE REPERENCE: 200125.434
; CURRENT APPLICANTON NUMBER: US/09/964,277
; CURRENT APPLICATION NUMBER: US/09/964,277
; NUMBER OF SEQ ID NOS: 22
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 4.
                                                                                                                                                                                                                                                                                                                                           100.0%; Score 52; DB 9; Length 15
100.0%; Pred. No. 0.11;
ive 0; Mismatches 0; Indels
       APPLICANT: Luctor, Ralf M.
APPLICANT: Wei, Bo
TITLE OF INVENTION: DSP-15 DUAL-SPECIFICITY PHOSPHATASE
FILE REFERENCE: 200125, 433
CURRENT APPLICATION NUMBER: US/09/955,732
CURRENT FILING DATE: 2001-09-18
NUMBER OF SEQ ID NOS: 27
SOPTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: LUCHE, Ralf M.
APPLICANT: Wei, Bo
TITLE OF INVENTION: DSP-16 DUAL-SPECIFICITY PHOSPHATASE
FILE REPENCE: 200125.434
CURRENT APPLICATION NUMBER: US/09/964,277
CURRENT FILING DATE: 2001-09-25
NUMBER OF SEQ ID NOS: 22
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 3
LENGTH: 156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 3, Application US/09964277
Patent No. US20020137170A1
                                                                                                                                                                                                                                                                                                                                         Query Match 100.
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 100.
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        96 VHCLAGISRS 105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      97 VHCLAGISRS 106
                                                                                                                                                                                                                                                                                                                                                                                                                                      1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 VHCLAGISRS 10
                                                                                                                                                                                                                                                  TYPE: PRT
CORGANISM: Homo sapiens
US-09-955-732-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT
CORGANISM: Homo sapiens
US-09-964-277-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-964-277-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                               LENGTH: 155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-964-277-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-964-277-4
                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                    ö
                   ; OTHER INFORMATION: Description of Artificial Sequence: rMKP-X US-10-803-738-8
                                                                                    Query Match 100.0%; Score 52; DB 17; Length 141; Best Local Similarity 100.0%; Pred. No. 0.098; Matches 10; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 100.0%; Score 52; DB 9; Length 155; Best Local Similarity 100.0%; Pred. No. 0.11; Matches 10; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 52; DB 9; Length 155; llarity 100.0%; Pred. No. 0.11; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                 Sequence 6, Application US/09964277;
Sequence 10. US20020137170A1
GENERAL INFORMATION:
APPLICANT: Luche, Ralf M.
TITLE OF INVENTION: DSP-16 DUAL-SPECIFICITY PHOSPHATASE
TITLE REFERENCE: 200125.434
FILLE REFERENCE: 200125.434
CURRENT APPLICATION NUMBER: US/09/964,277
CURRENT FILING DATE: 2001-09-25
NUMBER OF SEQ ID NOS: 22
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 6
LENTH: 155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Luche, Ralf M.
APPLICANT: Wei, Bo
TITLE OF INVENTION: DSP-16 DUAL-SPECIFICITY PHOSPHATASE
TITLE REPERENCE: 200125-434
CURRENT APPLICATION NUMBER: US/09/964,277
CURRENT FILING DATE: 2001-09-25
NUMBER OF SEQ ID NOS: 22
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 7
LENGTH: 155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; Sequence 7, Application US/09964277; Patent No. US20020137170A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-955-732-6
; Sequence 6, Application US/09955732
; Publication No. US20020182203A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             96 VHCLAGISRS 105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  96 VHCLAGISRS 105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 VHCLAGISRS 10
                                                                                                                                                                                 1 VHCLAGISRS 10
                                                                                                                                                                                                                     85 VHCLAGISRS 94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity
Matches 10; Conserv
                                                                                                                                                                                                                                                                                                RESULT 9
US-09-964-277-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 10
US-09-964-277-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-964-277-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-964-277-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 11
```

g

à

ö

Gaps

ö

ö

ö

```
DB 14; Length 167;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 52; DB 9; Length 168; 100.0%; Pred. No. 0.12; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 52; DB 9; Length 168; 100.0%; Pred. No. 0.12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 9, Application US/09847519A; Patent No. US20020102693A1; General INFORMATION:
GENERAL INFORMATION:
APPLICANT: Luche, Ralf M.
TITLE OF INVENTION: DSP-14 DUAL-SPECIFICITY PHOSPHATASE; FILE REFERENCE: 200125-422; CURRENT APPLICATION NUMBER: US/09/847,519A; CURRENT FILING DATE: 2001-05-01; NUMBER OF SEQ ID NOS: 17; SOFFWARE: Patentin Ver. 2.1; SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                    RESULT 17
US-09-775-925-24
; Sequence 24, Application US/09775925
; Patent No. US20010049358A1
; GENERAL INFORMATION:
; APPLICANT: Luche, Ralf M.
; APPLICANT: Wei, B.
; TITLE OF INVENTION: DSP-12 AND DSP-13 DUAL-SPECIFICITY:
; TITLE OF INVENTION: PHOSPHATASES
; FILE REFERENCE: 200125.40
; CURRENT APPLICANT: 2001-25.40
; CURRENT FILING DATE: 2001-02-01
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 24

LENGTH: 168
                                                                                                                                                                                        Query Match 100.0%; Score 52; DB 14; Sest Local Similarity 100.0%; Pred. No. 0.12; Matches 10; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches
                      NUMBER OF SEQ ID NOS: 20
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 13
2003-01-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 100.
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 100.
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           108 VHCLAGISRS 117
                                                                                                                                                                                                                                                                                                                       108 VHCLAGISRS 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            108 VHCLAGISRS 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                               1 VHCLAGISRS 10
                                                                                   LENGTH: 167
TYPE: PRT
CRGANISM: Homo sapiens
US-10-346-356-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Homo sapiens
    CURRENT FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-847-519A-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-847-519A-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-775-925-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGIH: 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                          임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
        ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%; Score 52; DB 9; Length 156; 100.0%; Pred. No. 0.11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 52; DB 9; Length 156; 100.0%; Pred. No. 0.11; tive 0; Mismatches 0; Indels
                                                                                                                                                                                        ; Sequence 3, Application US/09955732; Bublication No. US20020182203A1; Publication No. US20020182203A1; Bublication No. US20020182203A1; Bublication No. USPAPLICANT: Luche, Ralf M.; APPLICANT: Luche, Ralf M.; APPLICANT: Wei, Bo. TITLE OF INVENTION: DSP-15 DUAL-SPECIFICITY PHOSPHATASE; FILE REFREBRICE: 200125.433; CURRENT APPLICATION NUMBER: US/09/955,732; CURRENT FILING DATE: 2010-09-18; NUMBER OF SEQ ID NOS: 27; SOFFWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 4, Application US/09955732
Publication No. US20020182203A1
GENERAL INFORMATION:
APPLICANT: Luche, Roi, Bo
TITLE OF INVENTION: DSP-15 DUAL-SPECIFICITY PHOSPHATASE
FILE REPRENCE: 200125,433
CURRENT FILING DATE: 2001-09-18
CURRENT FILING DATE: 2001-09-18
NUMBER OF SEQ ID NOS: 27
SOFTWARE: FASESEO for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Luche, Ralf M.
APPLICANT: Wei, Bo
TITLE OF INVENTION: DSP-10 DUAL-SPECIFICITY PHOSPHATASE
FILE REFERENCE: 200125.416C1
CURRENT APPLICATION NUMBER: US/10/346,356
        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Mismatches
        0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-346-356-13
; Sequence 13. Application US/10346356
; Septence 13. Application No. US20030138931A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 100.
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10; Conservative
        10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  97 VHCLAGISRS 106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97 VHCLAGISRS 106
                                                                                     97 VHCLAGISRS 106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 VHCLAGISRS 10
                                                   1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: PRT
COCGANISM: Homo sapiens
US-09-955-732-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ ID NO 3
LENGTH: 156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-955-732-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
           Matches
                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                     ò
```

ö

Gaps ö

Indels

. 0

ö

ò

ó

Gaps

; 0

```
100.0%; Score 52; DB 15; Length 168; 100.0%; Pred. No. 0.12;
                                                                                                                                                                                               0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                              Query Match 100.
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 100.
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            108 VHCLAGISRS 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   108 VHCLAGISRS 117
                                                                                                                                                                                                                                                                                                                          108 VHCLAGISRS 117
                                                                                                                                                                                                                                                                1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
ORGANISM: Homo sapiens
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-655-073-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 22
US-10-962-126-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-962-126-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-644-554-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                 엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Score 52; DB 14; Length 168; 100.0%; Pred. No. 0.12; cive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 14; Length 168;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 21
US-10-655-073-15
; Sequence 15. Application US/10655073
; Publication No. US20040043411A1
; GENERAL INFORMATION:
; APPLICANT: Luche, Ralf M.; APPLICANT: Wei, Bo
; TITLE OF INVENTION: DSP-11 DUAL SPECIFICITY PHOSPHATASE; FILE REFERENCE: 200125.418C1
; CURRENT FILING DATE: 2003-09-04
; NUMBER OF SEQ ID NOS: 22
; SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Indels
                                                          RESULT 19
US-10-114-058-13
; Sequence 13, Application US/10314058
; Publication No. US20030119045A1
; GENERAL INFORMATION:
; APPLICANT: Luche, Ralf M.
; APPLICANT: Luche, Ralf M.
; TITLE OF INVENTION: DSP-9 DUAL-SPECIFICITY PHOSPHATASE
; TITLE REFRENCE: 200125.415C1
; CURRENT FILING DATE: 2002-12-05
; NUMBER OF SEQ ID NOS: 20
; SOFTWARE: PastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 20
US-10-405-808-15
$ Gequence 15, Application US/10405808
$ Publication No. US20030175829A1
$ GENERAL INFORMATION:
$ APPLICANT: Mach, Ralf M.
$ APPLICANT: Wei, BO.
$ TITLE OF INVENTION:
$ TITLE OF INVENTION UNMBER: US/10/405,808
$ CURRENT FILING DATE:
$ CURRENT FILING DATE:
$ NUMBER OF SEQ ID NOS: 21
$ SOFTWARE:
$ SOFTWA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Score 52; DB 14
100.0%; Pred. No. 0.12;
cive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 100.
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 100.
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               108 VHCLAGISRS 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               108 VHCLAGISRS 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO 15
LENGTH: 168
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-314-058-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-405-808-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 13
LENGTH: 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     o;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 17; Length 168; 0.12; hes 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Score 52; DB 17; Length 168; 100.0%; Pred. No. 0.12; ive 0; Mismatches 0; Indels
Sequence 24, Application US/10962126

Sequence 24, Application US/10962126

Publication No. US20050058650A1

GENERAL INFORMATION:

APPLICANT: Mai, Bo

TITLE OF INVENTION: DSP-12 AND DSP-13 DUAL-SPECIFICITY

TITLE OF INVENTION: PHOSPHATASES

FILE REFERENCE: 200125.420C1

CURRENT FILING DATE: 2004-10-08

PRIOR APPLICATION NUMBER: US 09/775,925

PRIOR FILING DATE: 2001-02-01

PRIOR FILING DATE: 2001-02-01

PRIOR PLICATION NUMBER: US 60/179,886

PRIOR PLICATION NUMBER: US 60/179,886

NUMBER OF SEQ ID NOS: 33

SOFTWARE: PastSEQ for Windows Version 4.0

SEMONT: 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-644-554-16

Sequence 16, Application US/10644554

Publication No. US20050075489A1

GENERAL INFORMATION:
APPLICANT: Luche, Ralf M.
APPLICANT: Wei, Bo.
ITILE OF INVENTION: DSP-5 DUAL-SPECIFICITY PHOSPHATASE
FILE REFERENCE: 200125,413C1

CURRENT FILING DATE: 2003-08-19

NUMBER OF SEQ ID NOS: 22

SOTUMARE: PateSEQ for Windows Version 4.0

SEQ ID NO 16

LENGTH: 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 52;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%;
100.0%;
```

```
RESULT 29
US-09-847-519A-8
; Sequence 8, Application US/09847519A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 100.
Best Local Similarity 100.
Matches 10; Conservative
                                                         Query Match 100.
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    110 VHCLAGISRS 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 110 VHCLAGISRS 119
                                                                                                                                                                         110 VHCLAGISRS 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 VHCLAGISRS 10
                                                                                                                                      1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Homo sapiens
; ORGANISM: Homo sapiens US-10-346-356-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: Fas
SEQ ID NO 23
LENGTH: 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 28
US-09-775-925-26
                                                                                                                                                                                                                                     RESULT 27
US-09-775-925-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-775-925-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-775-925-23
                                                                                                                                        ò
                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 100.0%; Score 52; DB 14; Length 169; Best Local Similarity 100.0%; Pred. No. 0.12; Matches 10; Conservative 0; Mismatches 0; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
100.0%; Score 52; DB 18; Length 168;
Best Local Similarity 100.0%; Pred. No. 0.12;
Matches 10; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 26
US-10-346-356-15
; Sequence 15. Application US/10346356
; Publication No. US20030138931A1
; GENERAL INFORMATION:
; APPLICANT: Luche, Ralf M.
; APPLICANT: Wei, Bo
; TITLE OF INVENTION: DSP-10 DUAL-SPECIFICITY PHOSPHATASE
; FILE REFERENCE: 200125.416C1
; CURRENT APPLICATION NUMBER: US/10/346,356
; CURRENT FILING DATE: 2003-01-15
; NUMBER OF SEQ ID NOS: 20
; SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                               APPLICANT: Wei, Bo
APPLICANT: Wei, Bo
TITLE OF INVENTION:
FILE REFERENCE: 200125.408C2
CURRENT APPLICATION NUMBER: US/10/659,661
CURRENT FILING DATE: 2003-09-08
NUMBER OF SEQ ID NOS: 26
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 12
LENGTH: 168
TYPE: PRT
CORGANISM: Homo sapien
US-10-658-661-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Luche, Ralf M.
APPLICANT: Wei, Bo
TITLE OF INVENTION: DSP-10 DUAL-SPECIFICITY PHOSPHATASE
FILE REFERENCE: 200125-416C1
CURRENT APPLICATION NUMBER: US/10/346,356
CURRENT FILING DATE: 2003-01-15
NUMBER OF SEQ ID NOS: 20
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; Sequence 12, Application US/10346356; Publication No. US20030138931A1; GENERAL INFORMATION:
                                                           ; Sequence 12, Application US/10658661
; Publication No. US20050176124A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          110 VHCLAGISRS 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       108 VHCLAGISRS 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 25
US-10-346-356-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-346-356-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQ ID NO 15
LENGTH: 169
TYPE: PRT
                                         US-10-658-661-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQ ID NO 12
LENGTH: 169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                  Gaps
                                                  .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
100.0%; Score 52; DB 14; Length 169; 100.0%; Pred. No. 0.12; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 100.0%; Score 52; DB 9; Length 170; Best Local Similarity 100.0%; Pred. No. 0.12; Matches 10; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 52; DB 9; Length 170; 100.0%; Pred. No. 0.12; cive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                  Sequence 23, Application US/09775925
Fatent No. US20010049358A1
GENERAL INFORMATION:
APPLICANT: Loude, Ralf M.
TITLE OF INVENTION: PHOSPHATASES
FILE REFERENCE: 200125.420
CURRENT APPLICATION NUMBER: US/09/775,925
CURRENT FILING DATE: 2001-02-01
NUMBER OF SEQ ID NOS: 33
SOFTWARE: FASTESQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 26, Application US/09775925
Sequence 26, Application US/09775925
Sequence No. US20010049358A1
GENERAL INFORMATION:
APPLICANT: LUGLOR Ralf M.
TITLE OF INVENTION: DSP-12 AND DSP-13 DUAL-SPECIFICITY
TITLE OF INVENTION: DSP-2420
CURRENT PELLOR TOWN UNMER: US/09/775,925
CURRENT FILING DATE: 200125.420
CURRENT FILING DATE: 200120-01
NUMBER OF SEQ ID NOS: 33
SOCTWARE: FastSEQ for Windows Version 4.0
LENGTH: 170
```

ö

Gaps

; 0

```
Query Match 100.0%; Score 52; DB 14; Length 170; Best Local Similarity 100.0%; Pred. No. 0.12; Matches 10; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%; Score 52; DB 14; Length 170; 100.0%; Pred. No. 0.12;
                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-405-808-14

Sequence 14, Application US/10405808

Publication No.US20030175829A1

GENERAL INFORMATION:

APPLICANT: Luche, Ralf M.

APPLICANT: Luche, Bo.

TITLE OF INVENTION: DSP-4 DUAL-SPECIFICITY PHOSPHATASE

FILE REFERENCE: 200125-410C1

CURRENT FILING DATE: 2003-04-01

NUMBER OF SEQ ID NOS: 21

SEQ ID NOS: 21

SEQ ID NO 14

SEQ ID NO 14

LENGTH: 170
                                                                                                                                                                                                                                                        GENERAL INCORMATION:
APPLICANT: Luche, Ralf M.
APPLICANT: Luche, Ralf M.
APPLICANT: Wei, Bo
TITLE OF INVENTION: DSP-9 DUAL-SPECIFICITY PHOSPHATASE
FILE REPERENCE: 200125.41501
CURRENT FILING DATE: 2002-12-05
NUMBER OF SEQ ID NOS: 20
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-405-808-16
Sequence 16, Application US/10405808
Sequence 16, Application US/10405808
Dublication No. US20030175829A1
GENERAL INFORMATION:
APPLICANT: Luche, Ralf M.
APPLICANT: Weil, Bo
TITLE OF INVENTION:
TITLE OF INVENTION:
FILE REFERENCE: 200125.410C1
                       ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
Best Local Similarity 100.0%; Pred. No. 0.12; Matches 10; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                                                                                                                 US-10-314-058-14;
Sequence 14, Application US/10314058;
Publication No. US20030119045A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 100.
Best Local Similarity 100.
Matches 10, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         110 VHCLAGISRS 119
                                                                                                           110 VHCLAGISRS 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            110 VHCLAGISRS 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 VHCLAGISRS 10
                                                                   1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-405-808-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-314-058-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0,
                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 14; Length 170;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%; Score 52; DB 9; Length 170; 100.0%; Pred. No. 0.12;
                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 52; DB 9; Length 170; 100.0%; Pred. No. 0.12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INCORAULOGOSSAL

GENERAL INCORACTION:

APPLICANT: LUCHO, Raif M.

APPLICANT: LUCHO, Raif M.

TITLE OF INVENTION: DSP-14 DUAL-SPECIFICITY PHOSPHATASE

FILE REFERENCE: 200125.422

CURRENT PEPLLICATION NUMBER: US/09/847,519A

CURRENT FILING DATE: 2001-05-01

NUMBER OF SEQ ID NOS: 17

SSOFTWARE: Patentin Ver. 2.1

SEQ ID NO 11

LENGTH: 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                         0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: LUCCHE, Ralf M.
APPLICANT: Wei, Bo
TITLE OF INVENTION DSP-9 DUAL-SPECIFICITY PHOSPHATASE
FILE REFERENCE: 200125.41501
CURRENT APPLICATION NUMBER: US/10/314,058
CURRENT FILING DATE: 2002-12-05
NUMBER OF SEQ ID NOS: 20
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 12
LENGTH: 170
TYPE: PRT
ORGANISM: Homo sapien
                  GENERAL INFORMATION:

APPLICANT: Luche, Ralf M.

APPLICANT: Wei, Balf M.

APPLICANT: Wei, Balf M.

APPLICANT: Wei, Balf M.

TITLE OF INVENTION: DSP-14 DUAL-SPECIFICITY PHOSPHATASE

FILE REFERENCE: 200125 422

CURRENT APPLICATION NUMBER: US/09/847,519A

CURRENT FILING DATE: 2001-05-01

NUMBER OF SEQ ID NOS: 17

SSCTWARER: Patentin Ver. 2.1

SEQ ID NO 8

LENGTH: 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Score 52;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; Sequence 11, Application US/09847519A ; Patent No. US20020102693A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-314-058-12
; Sequence 12, Application US/10314058
; Publication No. US20030119045A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 100.
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              110 VHCLAGISRS 119
  Patent No. US20020102693A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; ORGANISM: Homo sapiens
US-09-847-519A-11
                                                                                                                                                                                                                                                                  TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-847-519A-11
                                                                                                                                                                                                                                                                                                                US-09-847-519A-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-314-058-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
```

ò g

d

ð

ö

Gaps

. 0

ö

Gaps

ó.

```
Sequence 23, Application US/10962126

publication No. US20050058650A1

GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: LUCHE, Ralf M.
TITLE OF INVENTION: DSP-12 AND DSP-13 DUAL-SPECIFICITY
TITLE OF INVENTION: POSPHARASES
FILE REFERENCE: 200125.420C1
CURRENT FILING DATE: 2004-10-08
PRIOR PELICATION NUMBER: US 60/175,925
PRIOR PILING DATE: 2004-10-08
PRIOR FILING DATE: 2004-0-01
PRIOR FILING DATE: 2000-02-01
PRIOR FILING DATE: 2000-02-02
NUMBER OF SEQ ID NOS: 33
SOFTWARE: PRESENCE: Amindows Version 4.0
SEQ ID NO 23
LENGTH: 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-644-554-15; Sequence 15, Application US/10644554; Publication No. US20050075489A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                        ; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-962-126-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-962-126-26
                                    RESULT 37
US-10-962-126-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%; Score 52; DB 15; Length 170; 100.0%; Pred. No. 0.12; cive 0; Mismatches 0; Indels C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 15; Length 170;
                                                                                                                                                                                             DB 14; Length 170;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 16, Application US/10655073

Publication No. US20040043411A1

GENERAL INFORMATION:

APPLICANT: Luche, Ralf M.

TITLE OF INVENTION: DSP-11 DUAL SPECIFICITY PHOSPHATASE

FILLE REFERENCE: 200125.418C1

CURRENT APPLICANT: WINNER: US/10/655,073

CURRENT FILING DATE: 2003-09-04

NUMBER OF SEQ ID NOS: 22

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 16

LENGTH: 170
                                                                                                                                                                                                                                                                                                                                                                     RESULT 35
US-10-655-073-14
; Sequence 14, Application US/10655073
; Publication No. US20040043411A1
; GENERAL INFORMATION:
; APPLICANT: Luche, Ralf M.; APPLICANT: Wei, Bo
; TITLE OF INVENTION: DSP-11 DUAL SPECIFICITY PHOSPHATASE; FILE REFERENCE: 200125.418C1
; CURRENT FILING DATE: 2003-09-04
; NUMBER OF SEQ ID NOS: 22
; SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                  0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Score 52; DB 15
100.0%; Pred. No. 0.12;
                                                                                                                                                                                             100.0%; Score 52; DB 14
100.0%; Pred. No. 0.12;
                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
CURRENT APPLICATION NUMBER: US/10/405,808
CURRENT FILING DATE: 2003-04-01
NUMBER OF SEQ ID NOS: 21
SEQ ID NO 16
LENGTH: 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10; Conservative
                                                                                                                                                                                               Query Match 100.
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity 100
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                110 VHCLAGISRS 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                110 VHCLAGISRS 119
                                                                                                                                                                                                                                                                                                           110 VHCLAGISRS 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                          1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 170
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                             TYPE: PRT
CORGANISM: Homo sapien
US-10-405-808-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 36
US-10-655-073-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-655-073-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-655-073-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                             g
```

```
ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                           ;;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%; Score 52; DB 17; Length 170; 100.0%; Pred. No. 0.12; cive 0; Mismatches 0; Indels (
DB 17; Length 170;
0.12;
hes 0; Indels
                                                                                                                                                                                                                     Sequence 26, Application US/10962126
; Sequence 26, Application US/10962126
; Publication No. US20050058650A1
; GENERAL INFORMATION:
APPLICANT: Luche, Ralf M.
APPLICANT: Luche, Ralf M.
TITLE OF INVENTION: DSP-12 AND DSP-13 DUAL-SPECIFICITY
TITLE OF INVENTION: DPOSPHATASES
FILE REFERENCE: 200125.420C1
CURRENT APPLICATION NUMBER: US/10/962,126
CURRENT APPLICATION NUMBER: US 69/775,925
PRIOR PELING DATE: 2004-10-08
; PRIOR PELING DATE: 2000-02-01
; PRIOR FILING DATE: 2000-02-01
; PRIOR FILING DATE: 2000-02-02
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PastSEQ for Windows Version 4.0
; SEQ ID NO 26
                                           0; Mismatches
    100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ouery Match
Best Local Similarity 100.
Matches 10; Conservative
  Query Match 100.
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                          110 VHCLAGISRS 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                110 VHCLAGISRS 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 VHCLAGISRS 10
                                                                                     1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; ORGANISM: Homo sapiens
US-10-962-126-26
```

```
.
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 100.
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity 100
Matches 10; Conservative
                                                  110 VHCLAGISRS 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               110 VHCLAGISRS 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99 VHCLAGISRS 108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 VHCLAGISRS 10
               1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                             TYPE: PRT
; ORGANISM: Homo sapien
US-10-658-661-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-925-299-842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-925-299-842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-925-299-842
                                                                                                                        US-10-658-661-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                ò
                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ó
                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Score 52; DB 18; Length 170; 100.0%; Pred. No. 0.12; ive 0; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Score 52; DB 17; Length 170; 100.0%; Pred. No. 0.12; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                     100.0%; Score 52; DB 17; Length 170; 100.0%; Pred. No. 0.12; cive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 17, Application US/10644554
Publication No. US20050075489A1
GENERAL INFORMATION:
APPLICANT: Luch. Ralf M.
TITLE OF INVENTION: DSP-5 DUAL-SPECIFICITY PHOSPHATASE
FILE REFERENCE: 200125.413C1
CURRENT APPLICATION NUMBER: US/10/644,554
CURRENT FILING DATE: 2003-08-19
NUMBER OF SEQ ID NOS: 22
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 17
LENGTH: 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 11, Application US/10658661
Fublication No. US20050176124A1
GENERAL INFORMATION:
APPLICANT: Luche, Raif M.
APPLICANT: Wei, Bo
TITLE REFERENCE: 200125.408C2
CURRENT APPLICATION NUMBER: US/10/658,661
CURRENT FILING DATE: 2003-09-08
NUMBER OF SEQ ID NGS: 26
SOFTWARE: FASELSEQ for Windows Version 4.0
           APPLICANT: Wei, BO
TITLE OF INVENTION: DSP-5 DUAL-SPECIFICITY PHOSPHATASE
FILE REPERENCE: 200125.413C1
CURRENT APPLICATION NUMBER: US/10/644,554
CURRENT FILING DATE: 2003-08-19
NUMBER OF SEQ ID NOS: 22
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 15
LENGTH: 170
                                                                                                                                                                                                                                             Ouery Match
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best_Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                         110 VHCLAGISRS 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               110 VHCLAGISRS 119
APPLICANT: Luche, Ralf M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                          1 VHCLAGISRS 10
                                                                                                                                                                             TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 40
US-10-644-554-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 41
US-10-658-661-11
                                                                                                                                                                                                                   US-10-644-554-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-644-554-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-658-661-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQ ID NO 11
LENGTH: 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       요
                                                                                                                                                                                                                                                                                                                              ઠ
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 842, Application US/09925299;
Patent No. US20000055627A1;
GENERAL INFORMATION:
TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies;
FILE REFERENCE: PA102
FILE REFERENCE: PA102
CURRENT APPLICATION NUMBER: US/09/925,299
CURRENT APPLICATION NUMBER: D001-08-10;
PRIOR PILING DATE: 2000-038-10
PRIOR PILING DATE: 2000-038-10;
PRIOR FILING DATE: 1999-03-12
NUMBER OF SEQ ID NOS: 1556;
SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 52; DB 18; Length 170; 100.0%; Pred. No. 0.12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Score 52; DB 9; Length 189; 100.0%; Pred. No. 0.13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; Sequence 842, Application US/09925299;
; Publication No. US20030040617A9;
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies;
; FILE REFERENCE: PA102
Sequence 13, Application US/10658661
; Publication No. US20050176124A1
; GENERAL INFORMATION:
; APPLICANT: Luche, Ralf M.
; APPLICANT: Luche, Bo
; TITLE OF INVENTION: DSP-3 DUAL-SPECIFICITY PHOSPHATASE
; FILE REFERENCE: 200125, 408 C2
; CURRENT APPLICATION NUMBER: US/10/658,661
; CURRENT FILING DATE: 2003-09-08
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 13
; LENGTH: 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              us-lu-us-4sh-191

Sequence 191, Application US/10029345A

Publication No. US20650130286A1

GENERAL INFORMATION:

APPLICANT: Bristol-Myers Squibb Company

TITLE OF INVERTION:

FILE REFERENCE: D0072.NP

CURRENT PAPLICATION NUMBER: US/10/029,345A

CURRENT FILING DATE: 2001-12-20

PRIOR FILING DATE: 2001-12-20

PRIOR FILING DATE: 2001-03-30

PRIOR FILING DATE: 2001-03-30

PRIOR FILING DATE: 2001-03-30

PRIOR FILING DATE: 2001-05-01

PRIOR FILING DATE: 2001-06-05

PRIOR FILING DATE: 2001-06-25

NUMBER OF SEQ ID NOS: 208

SOFTWARE: PatentIn version 3.0

LENGTH 300
                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                       .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
100.0%; Score 52; DB 18; Length 302;
Best Local Similarity 100.0%; Pred. No. 0.21;
Matches 10; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                       Query Match

100.0%; Score 52; DB 10; Length 189;
Best Local Similarity 100.0%; Pred. No. 0.13;
Matches 10; Conservative 0; Mismatches 0; Indels
CURRENT APPLICATION NUMBER: US/09/925,299
CURRENT FILING DATE: 2001-08-10
PRIOR PAPLICATION NUMBER: PCT/US00/05883
PRIOR FILING DATE: 2000-03-08
PRIOR APPLICATION NUMBER: 60/124,270
PRIOR PILING DATE: 1999-03-12
NUMBER OF SEQ ID NOS: 1556
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 842
LENGTH: 189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99 VHCLAGISRS 108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 VHCLAGISRS 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                        TYPE: PRT
CORGANISM: Homo sapiens
US-09-925-299-842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-029-345A-191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 45
US-10-029-345A-191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
```

Search completed: August 31, 2005, 11:14:15 Job time : 161 secs

This Page Blank (uspto)

Sequence 25, Appl Sequence 25, Appl Sequence 20824, A

Sequence 2095, A Sequence 21011, A Sequence 21303, A Sequence 21307, A Sequence 21820, A Sequence 2665, A Sequence 26620, A Sequence 26912, A Sequence 27145, A Sequence 27145, A Sequence 115, Appl Sequence 115, Appl Sequence 27, Appl Sequence 113, Appl Sequence 158, App

Title: Perfect score:

Sequence:

OM nucleic

Run on:

Scoring table:

Searched:

Database

```
GCGAGCGGGAGCGCAGCCGCCCTCTCGGCGCGCGGCGCCCTCGCAAGTCCGGGAGGC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGAGGGGGAGCGCCCCTCTCGGCTCCGCGGCGCGCCTCGCAAGTCCGGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 3332,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Ducto, Ralf M.
APPLICANT: Wei, Bo
TITLE OF INVENTION: DSP-16 DUAL-SPECIFICITY PHOSPHATASE
FILE REPRENCE: 200125.434
CURRENT APPLICATION NUMBER: US/09/964,277
CURRENT FILING DATE: 2001-09-25
NUMBER OF SEQ ID NOS: 22
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 20
LENGTH: 3332
          US-10-377-072-25

US-10-377-072-25

US-10-377-072-25

US-10-377-930-20824

US-10-357-930-21071

US-10-357-930-21071

US-10-357-930-21307

US-10-357-930-28120

US-10-357-930-26815

US-10-357-930-26815

US-10-357-930-26815

US-10-357-930-26815

US-10-357-930-26815

US-10-357-930-26815

US-10-357-930-26815

US-10-357-930-2815

US-10-368-381-115

US-10-368-381-115

US-10-094-48-3

US-10-072-012-255

US-10-072-012-257

US-10-072-012-257

US-10-072-012-257

US-10-072-012-257

US-10-072-012-257

US-10-072-012-257

US-10-072-012-257

US-10-072-012-257

US-10-072-012-257

US-10-072-012-27

US-10-072-012-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-357-930-31909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-357-930-40868
US-10-357-930-41017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-357-930-10717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%; Score 3332;
100.0%; Pred. No. 0;
iive 0; Mismatches
 JS-09-816-494-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20, Application US/09964277; Patent No. US20020137170A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 100.
Matches 3332; Conservative
                                                                                                                                                                                                                                          TYPE: DNA
CORGANISM: Homo sapiens
US-09-964-277-20
US-09-964-277-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                           1660
1638.2
886.8
886.8
595
537.4
417.2
415.2
415.2
1660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         _
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
   Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20, Appl
Sequence 1, Appli
Sequence 26134, A
Sequence 261, App
Sequence 17, Appl
Sequence 117, Appl
                                                                                                              0; Search time 2061 Seconds
(without alignments)
10587.567 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                               1 gagagaaggagaagataata........318aagatgaacttggtttc 3332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Published Applications NA:*

1: /cgn2_6/ptodata/2/pubpna/USO7_PUBCOMB.seq:*
2: /cgn2_6/ptodata/2/pubpna/USO6_NEW_PUB.seq:*
3: /cgn2_6/ptodata/2/pubpna/USO6_PUBCOMB.seq:*
4: /cgn2_6/ptodata/2/pubpna/USO6_PUBCOMB.seq:*
5: /cgn2_6/ptodata/2/pubpna/USO7_BWA_PUB.seq:*
6: /cgn2_6/ptodata/2/pubpna/USO7_BWA_PUB.seq:*
7: /cgn2_6/ptodata/2/pubpna/USO7_BWA_PUB.seq:*
8: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
10: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
10: /cgn2_6/ptodata/2/pubpna/USO9_PUBCOMB.seq:*
11: /cgn2_6/ptodata/2/pubpna/USO9_PUBCOMB.seq:*
11: /cgn2_6/ptodata/2/pubpna/USO9_BPUBCOMB.seq:*
12: /cgn2_6/ptodata/2/pubpna/USO9_BPUBCOMB.seq:*
13: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
14: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
15: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
17: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
17: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
18: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
19: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
20: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
21: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
22: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
23: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
23: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
23: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
23: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
24: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
25: /cgn2_6/ptodata/2/pubpna/USO0_NEW_PUB.seq:*
26: /cgn2_6/ptodata/2/pubpna/USO0_NEW_PUB.seq:*
27: /cgn2_6/ptodata/2/pubpna/USO0_NEW_PUB.seq:*
28: /cgn2_6/ptodata/2/pubpna/USO0_NEW_PUB.seq:*
29: /cgn2_6/ptodata/2/pubpna/USO0_NEW_PUB.seq:*
20: /cgn2_6/ptodata/2/pubpna/USO0_NEW_PUB.seq:*
20: /cgn2_6/ptodata/2/pubpna/USO0_NEW_PUB.seq:*
20: /cgn2_6/ptodata/2/pubpna/USO0_NEW_PUB.seq:*
20: /cg
                                                                                                                                                                                                                                                                                                                                14677368
                    GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-964-277-1
US-09-964-277-1
US-10-425-114-26234
US-10-370-715B-261
US-10-333-17
US-10-029-345A-108
US-10-029-345A-147
                                                                                                                                                                                                                                                                                                                                Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                  7338684 segs, 3274456166 residues
                                                                                                                   1, 2005, 02:00:40
                                                                                                                                                                                                                                                                                                                                                                                                              Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                   nucleic search, using sw model
                                                                                                                                                                                                                                                 IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                 Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-964-277-20
3332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3332
3496
3625
3521
3766
5450
                                                                                                                 September
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               94.8
94.8
93.0
93.2
```

Sequence 10717, A Sequence 31909, A

Sequence 40868, Sequence 41017,

ô

.; 0

Indels

9 9 120

3158 3145 3133.4 3118.8 3106.2

Score

No.

Result

음 8 ద ò d ò

g ò g ò a ò qq

```
GCGAGCGGGAGCGCCCTCTCGGCTCCGCGGCGCGCCTCGCAAGTCCGGAAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                GTCGGCGCCCCCAAAAGCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAAGAATGATGTAATGCGCTGCTCCTCCAAAGCATCTTTTGTTGTGGAATGGTTATTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGCTGAGCCTTTGAGCACCACCATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITGTGGAATACAATACCACCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTTGTGGAATACAATACATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATGAAGCGAAGGTTGCAACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCGTTCAGCG
                                                                                                                                                                                                                                                                                           1 GAGAGAAGAGAGAAGATAATATACTGAAAAGAAGAAGAAGGAGGAGAGGGGCGACGGGACGGGAC
                                                                                                                                                                                                                                                                                                                                                                               GAGGGGGCCCGAGGGGAGACGCCGTGACAACTTTCGTTTCCCTCTGAGGGAATTGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                  GTCGGCGCCCCCAAAAGCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGGGGAGCAAAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGTCATCTCTTTATGAATGTGAGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCACATCAACGGGAAAGAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTT
                                                                                                                                                                                                                                                                         GAGAGAAGAAGAAGATAATATACTGAAAAGAAGAGGAGGAGGAGGAGGACGACGGGAC
                                                                                                                                                                                                                                                                                                                              GCGAGCGGGAGCGCCAGCCGCCTCCGCGCCGCGGCGCCCTCGCAAGTCCGGGAGGC
                                                                                                                                                                                                                                                   0; Indels 164;
                                                                                                                                                                                                                        Length 3496;
                                                                        PHOSPHATASE
                                                                                                                                                                                                                           6
                                                                                                                                                                                                                           В
                                                                                                                                                                                                                        Score 3158; DE; Pred. No. 0; 0; Mismatches
   Sequence 1, Application US/09964277;
Patent No. US20020137170A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Wei, Bo
TITLE OF INVENTION: DSP-16 DUAL-SPECIFICITY
FILE REFERENCE: 200125,434
CURRENT APPLICATION NUMBER: US/09/964,277
CURRENT FILING DATE: 2001-09-25
NUMBER OF SEQ ID NOS: 22
NUMBER OF SEQ ID NOS: 22
SOFTWARE: FRSELSEQ for Windows Version 4.0
                                                                       DUAL-SPECIFICITY
                                                                                                                                                                                                                          94.8%;
                                                                                                                                                                                                                          Query Match
Best Local Similarity 95.3
Matches 3332; Conservative
                                                                                                                                                            LENGTH: 3496
TYPE: DNA
CRGANISM: Homo sapiens
US-09-964-277-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                               ч
                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          661
                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   721
                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                               ò
             2340
                                   2400
                                                                                   2460
                                                                                                            2460
                                                                                                                                      2520
                                                                                                                                                              2520
                                                                                                                                                                                       2580
                                                                                                                                                                                                                                          2640
                                                                                                                                                                                                                                                                 2640
                                                                                                                                                                                                                                                                                            2700
                                                                                                                                                                                                                                                                                                                    2700
                                                                                                                                                                                                                                                                                                                                             2760
                                                                                                                                                                                                                                                                                                                                                                     2760
                                                                                                                                                                                                                                                                                                                                                                                              2820
                                                                                                                                                                                                                                                                                                                                                                                                                       2820
                                                                                                                                                                                                                                                                                                                                                                                                                                                2880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2941 TGCTGGACGACCATTAGGGGCCTTGCCAAGGTCTACCTTAGAGCAAACCCAGTACCTCA 3000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGCTGGACGACCATTAGGGGCCTTGCCAAGGTCTACCTTAGAGCAAACCCAGTACCTCA 3000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GACAGGAAAGTCGGGGCTTTGACCACTACCATATCTGGTAGCCCATTTTCTAGGCATTGT 3060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAATAGGTAGGTAGCTAGTCACACTTTTCAGACCAATTCAAACTGTCTATGCACAAATT 3120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCCGTGGGCCTAGATGGAGATATTTTTTTTTTCTCAGCTTTTATGAAGAGAAGAAA 3180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGGAGCTAACGAGTCTACCTCCTCTTTGTAAATCAAAGAATTGTTTAAAATGGGATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGTCTAGGATTCAGCTGAACCACCAGGAACCTGGCAACATCACGATTTAAGCTAAGGTT
                                                                                    2881 ATCCAAAGCTGATTCACAAACCCACGCTCACCTGACAGCCGAGGGACACGAGGATCACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AATCTGAAATATATATATATATACATACATATATTTTTTGGAAAAATGGAGCTATGGTGTAA
                                                                                                                                                                                                     AACCATITIATICAGIGAATIACACAICCTCTTGTICTAAAAAAGCAAGIGICTTIGGI
                                                                                                                                                                                                                                                                                                             AACCATTTTATTCAGTGAATTACACATCCTCTTGTTCTTAAAAAAAGCAAGTGTCTTTGGT
                                                                                                                                                                                                                                                                                                                                            GTTGGAGGACAAAATCCCCTACCATTTTCCACGTTGTGCTACTAAGAGATCTCAAATATT
                                                                                                                                                                                                                                                                                                                                                         GTTGGAGGACAAAATCCCCTACCATTTTCCACGTTGTGCTACTAAGAGATCTCAAATATT
                                                                                                                                                                                                                                                                                                                                                                                                           ATCCAAAGCTGATTCACAAACCCACGCTCACCTGACAGCCGAGGACACGAGCATCACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GACAGGAAAGTCGGGGCTTTGACCACTACCATATCTGGTAGCCCATTTTCTAGGCATTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAATAGGTAGGTAGCTAGTCACACTTTTCAGACCAATTCAAACTGTCTATGCACAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGTGGGCAGTCAGCTTTTCGGGCAGCATGGAAATCATTGAGGTCTCCTGAGAAGA
                                                  AATCTGAAATATATATATATGTACATACATATATTTTTTGGAAAATGGAGCTATGGTGTAA
                                                                                                                                                                                       AAGCAACAGGTGGATCAACCCAGTTGTTACTCTTTAACATCTGCATTTTGAGAGATCAGC
                                                                                                                                                                                                                                          TAATACTTCTCTCAACAAAATGGAAGGGCAGATGCTAGAATCCCCCTAGACGGAGGAA
                                                                                                                                                                                                                                                                                                                                                                                               AGTCTTTGTCCGGACCCTTCCATAGTACACCTTAGCGCTGAGACTGAGCCAGCTTGGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                TCAGGTAGGTAGACCCTGTTAGGGACAGAGCCTAGTGGTAAATCCAAGAGAAATGATCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCAATCCTTTAAATAAAGATGAACTTGGTTTC 3332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCAATCCTTTAAATAAAGATGAACTTGGTTTC 3332
                                                                                                                                                                                                                  2521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3241
                                                                                                                                                                                                                                                                                             2641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3301
                                                                                                                                                                 2461
                                                                                                                                                                                         2521
                                                                                                                                                                                                                                           2581
                                                                                                                                                                                                                                                                                                                      2641
                                                                                                                                                                                                                                                                                                                                                                                                                          2761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3001
             2281
                                      2341
                                                                                                                                                                                                                                                                                                                                                2701
                                                                                                                                                                                                                                                                                                                                                                       2701
                                                                                                                                                                                                                                                                                                                                                                                                2761
                                                                                                                                                                                                                                                                                                                                                                                                                                                   2821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2941
                                                                                                                                         2461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       유
```

g

δ

셤

ò

g

ò

\$ g

셤

ò

셤 ઠે

Š

ઠે

ò

ò

ò

120

180

120

9

Gaps

300

300 360 360 420

240 240 540

540 9 600 999 999 720 720 780 780

721

g

N

RESULT

Fri

1152 TTGCCAACATTGGGCCAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATG 1211 1092 GCCTCTGTGAAGGAAAATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTG 1151 241 421 551 481 611 541 671 601 661 791 721 851 781 911 841 912 AACATAAGGTTGACATTGATTGCAGTCAGAAGGTTGTAGTTTACGATCAAAGCTCCCAAG 971 926 977 311 371 301 431 361 491 181 251

a

g ò g ò

```
1396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          963 GGCCTCTGTGAAGGAAAATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCT 1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTGAAAGAAAAAAGACCTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGAC 1276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GITGCCAACATTGGGCCAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGAT 1082
                                                                                                                                                                                                                                                                                                                                                                                                                542
                                                                                       900
                                                                                                              602
                                                                                                                                       99
                                                                                                                                                               662
                                                                                                                                                                                          720
                                                                                                                                                                                                                 722
                                                                                                                                                                                                                                           780
                                                                                                                                                                                                                                                                    782
                                                                                                                                                                                                                                                                                             840
                                                                                                                                                                                                                                                                                                                      842
                                                                                                                                                                                                                                                                                                                                                GATGTTGCCTCTCTCTTCAGACTGTTTTCTCACTGTACTTCGGGTAAACTGGAGAAG 900
                                                                                                                                                                                                                                                                                                                                                                         902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1443 TATGAGAAGAAGAAGAACCAGACTGGAGCATCAGGGCCAAAGAGGAAACTCAAGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGCACCTGGAGAAGCCAAATGAACCTGTCCCTGCTCTCAGAGGGTGGACAGAAAAGC
                                                                                                                                                                                                                                                                                                                                                            GATGTTGCCTCTCTCTCTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTCCTCAACAAGGAGCTGATGCAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1323 ATCGCTATCGCCTACATGAAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1383 GTGAAAGAAAAAAGACCTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAAGCCTCCAATGGATGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TATGAGAAGAAGATTAAGAACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTG
                                                                                                      TITGIGGAATACAATACATCCCACATTITGAAGCCATTAATATCAACTGCTCCAAGCTT
                                                                                                                                                                                                                                                        AAACATAAGGTTGACATTGATTGCAGTCAGAAGGTTGTAGTTTACGATCAAAGCTCCCAA
                                                                                                                                                                                                                                                                                                            -----AGGAGCTGATGCAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCTGTCCAAAGCCTGACTTTATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGCTTTTGTGAAAAATTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATCGCTATCGCCTACATCATGAAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTT
AAAAGAGGACTTATTGTTGTTCATGGCCCCATGAGATGATTGGAACTCAAATTGTTACTGAG
                                                                                                                                                                                        TITGTGGAATACAATACATCCCACATTITGGAAGCCATTAATATCAACTGCTCCAAGCTT
                                                                                                                                                                                                                                           ATGAAGCGAAGGTTGCAACAGGACAAAGTGTTAAATTACAGAGCTCATCCAGCATTCAGCG
                                       GGCTGAGCCTTTGAGCACCACCACTTACATCATCGTGGCAAATTAAAGAAGGAGGTGGG
                                                                                                                                          AGGITGGIGGCICCIGCIGGAAAGIGGAACGGAAAAAGIGCIGCIAAITGAIAGCCGGCCA
                                                                                                                                                                                                                                                                                                                                                 841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1337
                                                                                                                543
                                                                                                                                                                                                                     663
                                                                                                                                                                                                                                                                                                                         783
                                                                                                                                                                                                                                                                                                                                                                          843
                                                                                                                                                                                                                                                                                                                                                                                                                             903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            977
                                                                 483
                                                                                         541
                                                                                                                                           601
                                                                                                                                                                   603
                                                                                                                                                                                                                                             721
                                                                                                                                                                                                                                                                       723
                                                                                                                                                                                                                                                                                                781
                                                                                                                                                                                                                                                                                                                                                                                                     901
                                                                                                                                                                                                                                                                                                                                                                                                                                                      927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          927
                                                                                                                                                                                            661
               423
                                         481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                  8 6
                                                                                 ò
                                                                                                            엄
                                                                                                                                        à
                                                                                                                                                              셤
                                                                                                                                                                                       ò
                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                       ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                 3317
                                                                                          3610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ω,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAGGGGGCCCGAGGGGGGAGGCCGTGACAACTTTCCTTTCCCTCTGAGGGAATTGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAGGGGGCCCGAGGGGAGACGCCGTGACATTCGTTTCCTCTGAGGGAATTGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCACATCAACGGGAAAGAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TAACTCTCCTTTTGCCAGTCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 GAGAGAAGGAGAAGATAATATACTGAAAAGAAGAGGAGGAGGAGGAGGGACGGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTCGGCGCCCCAAAAGCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGGAGCAAAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAAGAATGATGTAATGCACTGGCTCCAAAGCATCTTTTGTTGTGGAATGGTTATTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGTCATCTTTTATGAATCAAATGTGAGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCACATCAACGGGAAAGAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAAGAATGATGTAATGCGCTGCTGCTCCAAAGCATCTTTTGTTGTGGAATGGTTATTCC
                                                                 GAACCACCAGGAACCTGGCAACATCACGATTTAAGCTAAGGTTGGGAGGCTAACGAGTCT
                                 GAACCACCAGGAACCTGGCAACAACATCACGATTTAAGCTAAGGTTGGGAGGCTAACGAGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTCGGCGCCCCAAAAGCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 3521;
                                                                                                                                                                                                                                                                                                                                                                 ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels 166;
                                                                                                                                                                                                                                                                                                                                     APPLICANT: WOOD, WILLIAM I.
APPLICANT: WOLV THOMAS D.
TITLE OF INVENTION: Compositions and Methods for the Treatment TITLE OF INVENTION: Related Diseases
FILE REFERENCE: P1948R1-US
CURRENT APPLICATION NUMBER: US/10/370,715B
CURRENT FILING DATE: 2003-02-21
NUMBER OF SEQ ID NOS: 742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 3133.4;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                         Sequence 261, Application US/10370715B Publication No. US20040258678A1 GENERAL INFORMATION:
                                                                                                                   JACKMAN, JANET
SCHOENFELD, JILL R.
WILLIAMS, P. MICKEY
WOOD, WILLIAM I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    94.0%;
95.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        94.0
Best Local Similarity 95.2
Matches 3330; Conservative
                                                                                                                                                                                                                                                                                       BRISDELL, HUNTE
                                                                                                                                                                                                                                                            APPLICANT: BODARY, SARAH C APPLICANT: CLARK, HILLARY
                                                                                                                                                                                                                                                   Patin Docket Preview
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM: Homo sapien
                                                                                                                                                                                  RESULT 4
US-10-370-715B-261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-370-715B-261
                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQ ID NO 261
                                                                                                                                                                                                                                                                                     APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                              3611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                           3491
                                                                   3258
                                                                                                                    3318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
                   3198
```

g

ò

g

ð

g

셤 ઠે 셤 ò 셤 ò 원 8

ò

2477 ANTITICALITATION
1503 CTRCACCTRCARGAGAACCAMATRANCTRCTCCTCTTTTCTAGAGGGTGACAGAANAGC 1562 1517 GAACCCCCTCCACCCCCCCTGTTCCCCTGTTCTCTCTCTC

684 9 744 720 804 780 864 840 900 926

```
GTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCATCGCTATCGCCTACATCATGAAG 1180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGATTAAGAACCAG 1300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            961 CTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACCGA 1020
                                                                                                                                                                                                                                                                                                                                                TGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAGAGCTTCAACTCTGTTCACCTGCTT 924
                                                                                                                                                                                                                                                                                                                                                                                                                                              GCAGGTGGGTTTGCTGAGTTCTCTTGTTTCCCTGGCCTCTGTGAAGGAAAATCCACT 960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACTGGACCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAATGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1261 GTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATCATGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1381 TCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAACCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTTCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ccrerccrecrercreagaegeregacagaaaagcgagacgccccccaccacccrer
                                            CCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAAAAATTTTGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACTEGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAATGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAGCGGGGGCCCCTCAGTCCACCCTGT
                                                                                 GGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCCCAC
                                                                                                                                                 ATTITIGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAGGAC
                                                                                                                                                                                                                   .....g
                                                                                                                                                     685
                                                                                                                                                                                                                                                                                                                                                    865
                                                                                                                                                                                                                                                                                                                                                                                                                   925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1421
                                                                                                                                                                                   661
                                                                                                                                                                                                                   745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1561
                                                                                    625
                                                                                                                                                                                                                                                                                    805
                                                                                                                                                                                                                                                                                                                                                                                                                                                 901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 927
                       265
                                             д
                                                                                                              ద
                                                                                                                                                                                셤
                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                d
                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8 &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                    à
                                                                                                                                                 δ
                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGGACACACCACC 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61 TCGGCTCCGCGGCGCCTCGCAAGTCCGGAAGGCGAGGGGGGCCCCGAGGGGGGGAGACGCC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGAGGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAAGAGAAAGA 384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAAGAGAGACTTATTGTTGTCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGAGGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACTCATCAACGGGAAAAGAAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAAAAGAAGGAGGAGGAGGAGGGGACGGGACGGGACGCGGAGCGCGCGCGCCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Grgacaactricgrircccrcrcagggaarriggaggicggccggccccaaaagcrrrcag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGTAATGCGCTGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCGGCTCCGCGCGCGCCTCGCAAGTCCGGGAGGCGGGGGGGCCCCGAGGGGAGGACGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGACAACTTTCGTTTCCCTCTGAGGGAATTGGGAGGTCGGCGCCCCAAAAGCTTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2; Indels 165; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 18; Length 3766;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; OTHER INFORMATION: Incyte ID No. US20040058341A1 7480570CB1
US-10-343-357-17
APPLICANT: LU, Dyung Aina M.; TRIBOULEY, Catherine M.; APPLICANT: GRIFFIN, Jennifer A.; BAUGHN, Mariah R.; APPLICANT: YUE, Henry; WARREN, Bridget A.; APPLICANT: YUE, Henry; WARREN, Bridget A.; APPLICANT: NUE, Henry; WARREN, Bridget A.; APPLICANT: NUEN: Double B.; CHAWLA, Narinder K.; TITLE OF INVENTION: PROTEIN PHOSPHATAGES; FILE REFRENCE: PI-0173 PCT
CURRENT FILING DATE: 2003-01-28
CURRENT FILING DATE: 2001-07-26
PRIOR FILING DATE: 2000-07-28
PRIOR FILING DATE: 2000-07-28
PRIOR FILING DATE: 2000-09-03
PRIOR FILING DATE: 2000-08-03
PRIOR FILING DATE: 2000-08-10
PRIOR FILING DATE: 2000-08-30
PRIOR FILING DATE: 2000-09-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
93.6%; Score 3118.8;
Best Local Similarity 95.2%; Pred. No. 0;
Matches 3305; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Homo sapiens FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: misc feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
```

	QY 2801 AGACTGAGCCAGCTTGGGGGTCAGGTAGCTAGGGACAGAGCCTAGTGGTA 2860 PS 2940 AGACTGAGCCAGCTTGGGGGTCAGTAGCTAGGGACCAGGCCTAGTGGTA 2999 QY 2861 AATCCAAGAGAAATGATCCTATCCAAGCCCAGCCCAGCC	0y 3041 GCCCATTTTCTAGGCATTGTGAATAGGTAGGTAGTCACACTTTTCAGACCAATTCA 3100 180 GCCCATTTTCTAGGCATTGTGAATAGGTAGGTAGTCACACTTTTCAGACCAATTCA 3239 0y 3101 AACTGTCTATGCACAAAATTCCCGTGGGCCTAGATGGAGATTTTTTTT	RESULT 6 US-10-029-345A-108 US-10-029-345A-108 Sequence 108, Application US/10029345A Publication No. US20050130286A1 APPLICATION: APPLICATION: TILLE OF INVENTION: POLYNUCLEOTIDES ENCODING NOVEL HUMAN PHOSPHATASES FILE REPERENCE: D0072.NP CURRENT APPLICATION NUMBER: US/10/029,345A CURRENT FILING DATE: 2001-12-20 PRIOR APPLICATION NUMBER: US 60/286,868 PRIOR PILING DATE: 2001-03-30 PRIOR PILING DATE: 2001-03-30 PRIOR PLING DATE: 2001-05-01 PRIOR APPLICATION NUMBER: US 60/287,735 PRIOR PLING DATE: 2001-05-01 PRIOR PLING DATE: 2001-06-05 PRIOR PLING DATE: 2001-06-05
Oy 1481 AGCGTGCCCAGCGTGGTGGTGAGAGACAGCCGTGGTACAGGCGCTCAGT 1540 Db 1621 AGCGTGCCCAGCGTGCAGCTGTTAGAGGACAGCCGCTGGTACAGGCGTCAGT 1680 Db 1541 AGCGTGCCCAGCGCGCGTGGTTAGAGCACAGCCGCTGGTACAGGCGTTCCTTCTT 1680 Qy 1541 AGGCTGCACCTGTCGGAGACAGGCTGGAATAAGCTCAAGAGCTTCTTCTT 1600 Db 1601 CTGGATATCAAATCAGTTCATATTCAGCCAGCATGACAGCTTCATACATGGCTTCTCT 1740 Qy 1601 CTGGATATCAAATCAGTTTCATATTCAGCCAGCATGACAGCTTCTTC 1800 Qy 1601 CTGGATATCAAATCAGTTTCATATTCAGCCAGCATGAGAGCATCCTTACATGGCTTCTC 1800 Qy 1661 CTGTCAGAAGATTCTATTTCATATTCAAATCTCCAGTTCTCTTACATGGCACACATACTCTC 1800 Qy 1661 CTGTCAGAAGATTTCATATTCAAAATCTACAAACTTCCACTACTCTGGATGGGACCAACAAGAG 1720 1801 TCATCAGAAGATCTTTGGAATACTACAAACTTCCACTACTCTGGATGGGACCAAACAACTTCCACTACTCTGGATGGA	CTATGCCAGTTCTCCCCTGTTCAGGACTATCGGAGCAGCTCCCGAACCAGTCCTGAT CTATGCCAGTTCTCCCCTGTTCAGGACTATCGGAGCAGCTCCCGAACCAGTCCTGAT CTATGCCAGTTCTCCCCCTGTTCAGGACTATCGGAGCAGCTCCCGAACCAGTCCTGAT TAGGAGGAAGCCAGCACCCCCAGCAGCAGCCTTCAGACAGCCGAGCTTCAGAACCAGCCCAGAGCTTCAGAAGCCAGCC	1961 TCCACCAGCAGCAGCACCTACGAGCTGGGCCTTAAGGGCTGGCACTTCG 2020 1961 TCCACCAGCAGCACTCG 2020 1961 TCCACCAGCAGCACTCG 2020 2021 TCCACCAGCAGCAGCACTCG 2020 2021 TCCACCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG	2261 CAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGCATCATGTCAGAGAACAGG 2320 2401 CAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGCATCATGTCAGAGAACAGG 2460 2321 TCACGGGAAGAGCTGCGGAAAGTGGAATTTGGAGAGCATTTCGGGCACCATGGAAATC 2380 2461 TCACGGGAAGAGCTGGGGAAAGTGGGCAGTCTAGCTTTTCGGGCACCATGGAAATC 2520 2381 ATTGAGGTCTCCTGGAAAGAGACACTTGTGACTTCTATAGACATTTTTTTT

1060

1180

```
1381 TCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGATTAAGAACGAG
                                                                                                                                                                                                                                                               1801 TCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGCAGCCCGAAACCAGTCCTGAT
                                                                                                                                                                                                                             TCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAACCAG
                                                                                                                                                                                                                                                        ACTEGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAATGAA
                                                                                                                                                                                                                                                                                                                                                                                                                            TCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAACAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCTGAT
                                                                  CCCGAGTCTCATTTCCTGCGTGTGCTGAATGACAGCTTTTGTGAGAAAATTTTGCCG
                                                                                                                                          TGGTTCGACAAATCACTAGATTTCATTCAGAAAGCCAAAAGCCTCCAATGGATGTGTTCTA
                                                                                                                                                    GTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATGAAG
                                                                                                                                                                                                  1501 CCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGGGAGACGCCCCTCAGTCCACTCTGT
                GCAGGTGGGTTTGCTGAGTTCTCTCGTTTTCCCTGGCCTCTGTGAAGGAAAATCCACT
                                           961 CTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACCGA
     မ္မ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1921
                                                                                                                                                                                                                                                                                                                                                         1621
                                                                                                                                                                                                                                                                                                                                                                       1541
                                                                                                                                                                                                                                                                                                                                                                                                  1601
                                                                                                                                                                                                                                                                                                                                                                                                                1741
                                                                                                                                                                                                                                                                                                                                                                                                                               1661
                                                                                                                                                                                                                                                                                                                                                                                                                                                          1721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1781
                                                                                                   1081
                                                                                                                               1141
                                                                                                                                            1001
                                                                                                                                                          1201
                                                                                                                                                                                                   1181
                                                                                                                                                                                                                               1241
                                                                                                                                                                                                                                                           1301
                                                                                                                                                                                                                                                                                      1361
                                                                                                                                                                                                                                                                                                                                            1481
                                                                                                                                                                                                                                                                                                                                                                                     1681
                  901
                                                                                                                 1001
                                                                                                                                                                        1121
                                                                                                                                                                                     1261
                                927
                                                                                      941
     925
                                                          927
                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                                                                          ద
                                                                                                                                                                                                                                                                                                                                                      Dp
                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                              Š
                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
               셤
                                ઠે
                                          g
                                                       8
                                                                    g
                                                                                 8 8
                                                                                                              8 B 8
                                                                                                                                                      8 S
                                                                                                                                                                                 8 &
                                                                                                                                                                                                             셤
                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                       ò
     ò
                                                                                ë,
                                                                                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                                                 600
                                                                                                                                                                                                                                                                                                                                                                               684
                                                                                                                                                                                                                                                                                                                                                                                            099
                                                                                                                                                                                                                                                                                                                                                                                                          744
                                                                                                                                                                                                                                                                                                                                                                                                                       720
                                                                                                                                                                                                                                                                                                                                                                                                                                     804
                                                                                                                                                                                                                                                                                                                                                                                                                                                  780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          900
                                                                                                                                                                  180
                                                                                                                                                                                             240
                                                                                                                                                                                                                        300
                                                                                                                                                                                                                                      384
                                                                                                                                                                                                                                                   360
                                                                                                                                                                                                                                                                   444
                                                                                                                                                                                                                                                                               420
                                                                                                                                                                                                                                                                                              504
                                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                                         564
                                                                                                                                                                                                                                                                                                                                                   624
                                                                                                                         144
                                                                                                                                       120
                                                                                                                                                    204
                                                                                                                                                                                264
                                                                                                                                                                                                          324
                                                                                                          9
                                                                                              84
                                                                                                                                                    GCTCCAAAGCATCTTTGTTGTTGTAATGGTAATTCCAGTCATCTCTTTATGAATCAAATG
                                                                                                                                                                                                                  CCAGCCTGACCTTCATACACTATTTAGTACAATGGAGTGGCTGAGCCTTTGAGCACCACCACC
                                                                                                                                                                                                                                                                                                                         ATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGGCTTATTGTTGTCATG
                                                                                                                                                                                                                                                                                                                                GGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCCCAC
                                                                                                                                                                                                                                                                                                                                                                                                          ATTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                  TGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCGGCTCCGCGCGCGCCTCGCAAGTCCGGGAGGCGAGGGGGCCCGAGGGGAAGACGCC
                                                                                                                                TCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGTAATGCCTGGCT
                                                                                                                                                                                                                                      CCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGGCTGAGCCTTTGAGCACACCACC
                                                                                                                                                                                                                                                                                                                                                                               GGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                       GCCCATGAGATGATTGGAACTCAAATTGTTACTGAGGGGTTGGTGGCTCTGCTGGAAAGT
                                                                                                     GAAAAGAAGAGGAGGAGGAGGGACGGACGGGACGCGAGCGGAGCGCAAGCGCCCCTC
                                                                                Gaps
                                                                                166;
                                                                   Length
                                                                                Indels
                                                                   22;
                                                                                3;
                                                                   DB
                                                                  Score 3106.2;
Pred. No. 0;
0; Mismatches
3.0
                                                                   Query Match 93.2%;
Best Local Similarity 95.1%;
Matches 3304; Conservative
 version
            LENGTH: 5450

TYPE: DNA

; ORGANISM: Homo sapiens

; FEATURE:

; NAME/KEY: CDS

; LOCATION: (538)..(2532)

US-10-029-345A-108
SOFTWARE: Patentin
SEQ ID NO 108
LENGTH: 5450
                                                                                                                                                                                                                                                                                                                                                                                                                                        745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           841
                                                                                                                         85
                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                       481
                                                                                                                                                                                                                                                                                                                                                                   541
                                                                                                                                                                                                                                                                                                                                                                                625
                                                                                                                                                                                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                                                                                                                                                                            685
                                                                                                                                                                                                                                                                                                                                                                                                                         661
                                                                                                                                                                                                                                                                                                                                                                                                                                                     721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               865
                                                                                               25
                                                                                                                                       61
                                                                                                                                                      145
                                                                                                                                                                   121
                                                                                                                                                                                  205
                                                                                                                                                                                              181
                                                                                                                                                                                                            265
                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                        325
                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                   385
                                                                                                                                                                                                                                                                                               445
                                                                                                                                                                                                                                                                                                                          505
                                                                                                                                                                                                                                                                                                                                                      565
                                                                                                                                                                                           8 B
                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                            ઠ
                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                     용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                          g
                                                                                                                                      g
                                                                                                                                                               ద
                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                              ò
                                                                                                                          ઠે
                                                                                                                                                     ç
```

1600 1740 1660 1980

1680

1420

121 GTGACCTGTTTAGCTGGGACTCCCCCCCCCCCCCCCCCC	
6 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4	-
12 CTGARGTETHAMAGETETTGGGGGGGGGGGGGGGGGGCCCGAAAGCTTTGGGGT 261 13 TCGARGTTAMAGETETTGGGGGGGGGGGGGGGGGGGGGGGGGGGG	IGGIIGGACAAAICAGIAGAIIICAIIGAGAAAGCAAAAAGCAAAAAGCAAGAAAGA

q

ద ò 8 8 8

8 & B

⋩

음 상 음

```
TIGATIGCAGICAGAAGGIIGIAGIITIACGAICAAAGCICCCAAGAIGIIGCCICICICI 856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               344 ATCAAATGTGAGGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTGTCATGGCCCATGAGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGCTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATCAAATGTGAGGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACACCACCATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAAGAGACTTATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACACCACCATTACATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAAGAAGACTTATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGGAAAGTGGAAAAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA
                                                                                                                                                                                                                                                                                                                                                                                                                            GAGAAAGAGACATTCACTTGGAGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGTCACCACCAGCCTGACCTCATACACTTTAGTACAATGGAGTGGCTGAGCCTTTGAGC
                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
Indels 165;
                                                                                                                                                                                                                                                                                                                                                                         Length 3544;
                                                                                                                                 DUAL SPECIFICITY
AND USES THEREFOR
                                                                                                                                                                                                                                                                                                                                                                          6
                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                          DB
                                                 RESULT 8
US-09-816-494-1
Sequence 1, Application US/09816494
Sequence 1, Application US/09816494
Sequence 1, Application US/09816494
Sequence 1, Sequence 1, Sequence 1, Sequence 1, TILE No. 1971EE OF INVENTION: BROSPHTARSE MOLECULES AND TITLE OF INVENTION: BROSPHTARSE MOLECULES AND FILE REFERENCE: 10448-030002
CURRENT APPLICATION NUMBER: US/09/816,494
CURRENT PILING DATE: 2001-03-23
PRIOR PILING DATE: 2000-03-24
NUMBER OF SEQ ID NOS: 10
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 1
LENGTH: 3544
                                                                                                                                                                                                                                                                                                                                                                         Score 2950; Di
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                       Query Match 88.5%;
Best Local Similarity 95.0%;
Matches 3135; Conservative 0
                                                                                                                                                                                                                                                                                                        ; FEATURE:
; NAME/KEY: CDS
; LOCATION: (589)...(2583)
US-09-816-494-1
                                                                                                                                                                                                                                                                                           ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           584
             3420
                                                                                                                                                                                                                                                                                                                                                                                                                                                      224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               644
                                                                                                                                                                                                                                                                               TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           음 강
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       요
8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                               qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                         2679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3419
                                                                                                                                                           2439
                                                                                                                                                                                                              2499
                                                                                                                                                                                                                                                                 2559
                                                                                                                                                                                                                                                                                                                       2619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCTTTATGAAGAGAAAGCGGAAACTGTCTAGGATTCAGCTGAACCACCAGGAACCTGGCAAC 3219
                                                                               2460
                                                                                                        2380
                                                                                                                                                                                     2580
                                                                                                                                                                                                                                        2640
                                                                                                                                                                                                                                                                                           2700
                                                                                                                                                                                                                                                                                                                                                2760
                                                                                                                                                                                                                                                                                                                                                                                                   2820
                                                                                                                                                                                                                                                                                                                                                                                                                             2739
                                                                                                                                                                                                                                                                                                                                                                                                                                                       2879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2939
                                                     2320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAAAATGGAGCTATGGTGTAAAAGCAACAGGTGGATCAACCCAGTTGTTACTCTTTAAC
                                                                                                                                                                                                                                                                                2701 ATCTGCATTTGAGAGATCAGCTAATACTTCTCTCAACAAAAATGGAAGGGCAGATGCTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3060 CGAGGGACACGAGCATCACTCTGCTGGACGACCATTAGGGGCCTTGCCAAGGTCTACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3120 TAGAGCAAACCCAGTACCTCAGACAGGAAAGTCGGGGCTTTGACCACTACCATATCTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3300 GCTTTATGAAGAGAAGGGAAACTGTCTAGGATTCAGCTGAACCAGGAACCTGGCAAC
  CAGITIPAAACGCAGAAGCIGCCAAAIGGAATITIGGAGAGGAGCAICAIGICAGAGAACAGG
                                                                    CAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAAAAAAGG
                                                                                                          TCACGGGAAGAGCTGGGGAAAGTGGGCCAGTCTAGCTTTTCGGGCAGCATGGAAATC
                                                                                                                       TCACGGGAAGAGCTGGGGAAAGTGGGCCAGTCTAGCTTTTCGGGCAGCATGGAAATC
                                                                                                                                                                                                                ATCTGCATTTGAGAGATCAGCTAATACTTCTCAACAAAAATGGAAGGCCAGATGCTAG
                                                                                                                                                                                                                                                                                                                                                                          AATCCCCCCTAGACGAGGAAAACCATTTTATTCAGTGAATTACACATCCTCTTGTTCTT
                                                                                                                                                                                                                                                                                                                                                                                         2761 AATCCCCCCTAGACGGAGGAAACCATTTTATTCAGTGAATTACACATCCTCTTGTTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                             AAAAAAGCAAGTGTTTGGTGTTGGAGGACAAAATCCCCTACCATTTTCCACGTTGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                           2821 AAAAAAGCAAGTGTCTTTGGTGTTGGAGGACAAAATCCCCCTACCATTTT-CACGTTGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TACTAAGAGATCTCAAATATTAGTCTTTGTCCGGACCCTTCCATAGTACACCTTAGCGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2880 TACTAAGAGATCTCAAATATTAGTCTTTGTCCCGACCCTTCCATAGTACACCCTTAGGCGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAGACTGAGCCAGCTTGGGGGTCAGGTAGACCTGTTAGGGACAGAGCCTAGTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAATCCAAGAGAAATGATCCTATCCAAAGCTGATTCACAAACCCAGGCTCACCTGACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3000 AATCCAAGAGAATGATCCTATCCAAAGCTGATTCACAAAACCCACGCTCACCTGACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CGAGGGACACGAGCATCACTCTGCTGGACGGACCATTAGGGGCCTTGCCAAGGTCTACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TAGAGCAAACCCCAGTACCTCAGACAGGAAAGTCGGGGCTTTGACCACTACCATATCTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGCCCATTTTCTAGGCATTGTGAATAGGTAGGTAGCTAGTCACACTTTTCAGACCAATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3280 GAATIGITIAAAAIGGGATIGICAAICCITIAAAIAAAGAIGAACTIGGITIC 3332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3040
                                                                                                                                                                                                                                                                                              2641
                                                                                                                                                                                                                                                                                                                                                                                                                                2680
                            2341
                                                                                                          2321
                                                                                                                                                             2381
                                                                                                                                                                                       2521
                                                                                                                                                                                                                 2440
                                                                                                                                                                                                                                          2581
                                                                                                                                                                                                                                                                    2500
                                                                                                                                                                                                                                                                                                                        2560
                                                                                                                                                                                                                                                                                                                                                                           2620
     2201
                                                       2261
                                                                               2401
                                                                                                                                    2461
```

8 & 8 &

8 8

d

P Q

δ g S a

ò g 셤 ò g 8

8

g

2

256 283 316 343

403

436 463 496 523 556 583 919 643 919 703 736 763 796 823

```
ACCTGCTTGCAGGTGGGTTTGCTGAGTTCTCTGGTTGTTTCCCTGGCCTCTGTGAAGGAA 1003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1004 AATCCACTCTAGTCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGC 1063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTTCAGACTGTTTTCTCACTGTACTTCTGGGGTAAACTGGAGAAGAGCTTCAACTCTGTTC 916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cricadacierriricicacieracirciedenaaciedaadadacircaacicieric 943
                                                                                                                                                                                                                                                                                                                                                                                                                                             GAGAAAGAGACATTCACTTIGAGAGGCTCTTIGCTGAAAATGGGTTTAACTCTCCTTTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TIGATIGCAGICAGAAGGITGTAGTITACGAICAAAGCICCCAAGAIGTIGCCICTCTCT
                                                                                                                                                                                                                                                                                                            284 CGCTGGCTGCTCCAAAGCATCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                       317 ATCAAATGTGAGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACACCACCATTACATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGACTTATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGGAAAGTGGAAAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGCTGCTCCTCCTCTTTTGTTGTGGAATGGTTATTCCAGTCATCTTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCTTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGC
                                                                                                                                                                                                                                                        Gaps
                    PALM
                                                                                                                                                                                                                                                       Indels 165;
                                                                                                                                                                                                                       Length 3544;
                    File Wrapper or
                                                                                                                                                                                                                       DB 17;
                                                                                                                                                                                                                                                       ö
                    - See
                                                                                                                                                                                                                     ; Score 2950; DB
; Pred. No. 0;
0; Mismatches
PRIOR FILING DATE: 2001-03-22
Remaining Prior Application data removed - S;
NUMBER OF SEQ ID NOS: 114
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 25
LENGTH: 3544
TYPE: DNA
ORGANISM: Homo Sapiens
FRATURE:
NAMMAKEY: CDS
LOCATION: (589)...(2586)
US-10-377-072-25
                                                                                                                                                                                                                     88.5%;
95.0%;
                                                                                                                                                                                                                         Query Match
Best Local Similarity 95.0
Matches 3135; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    944
                                                                                                                                                                                                                                                                                                                                                                                                                                                             344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     917
                                                                                                                                                                                                                                                                                                                                                        257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             404
                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Curtis, Rory A.J.
APPLICANT: Curtis, Rory A.J.
APPLICANT: Curtis, Rory A.J.
APPLICANT: Glogan, Thomas Joseph
APPLICANT: Glodan, Thomas Joseph
APPLICANT: Glods, Rachel B.
APPLICANT: Glods, Rachel B.
APPLICANT: Meyers, Rachel B.
APPLICANT: Majoung
APPLICANT: Radolph-Owen, Laura A.
APPLICANT: Chun, Miyoung
APPLICANT: Chun, Miyoung
APPLICANT: Chun, Miyoung
APPLICANT: Chun, Miyoung
APPLICANT: Radolph-Owen, Laura A.
APPLICANT: Chun, Miyoung
APPLICANT: Miyoung
APPLICANT: Miyoung
APPLICANT: NOWEL 2869, 25934, 26335, 49937, 49931 AND 49933 MOLECULES
TITLE OF INVENTION: NOWEL 26609, 16816, 16839, 49937, 49931 AND 49933 MOLECULES
TITLE OF INVENTION: AND UNESS THEREFOR
FILE REFERENCE: MIJO3-02-02-27
CURRENT FILING DATE: 2003-02-27
FRICH APPLICATION NUMBER: US 60/215,370
PRICH FILING DATE: 2000-06-29
PRICH APPLICATION NUMBER: US 60/187,455
PRICH FILING DATE: 2000-04-25
PRICH FILING DATE: 2000-04-26
PRICH PLING DATE: 2000-04-28
PRICH PLING DATE: 2000-04-28
PRICH PLING DATE: 2000-04-29
PRICH PLING DATE: 2000-04-29
PRICH PLING DATE: 2000-04-29
PRICH PLING DATE: 2000-04-29
PRICH PLING DATE: 2000-03-23
PRICH APPLICATION NUMBER: US 60/195,419
PRICH APPLICATION NUMBER: US 60/195,419
                                                                                                                                                       3032
                                                                                                                                                                                                                                                                                                                                                          3212
                                                                                                                                                                                                                                                                                                                                                                                                                            3272
                                                                                                                                                                                                                                                                                                                                                                                                                                                             3462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3332
                                                                                     2972
                                                                                                                         3162
                                                                                                                                                                                                                           3092
                                                                                                                                                                                                                                                          3282
                                                                                                                                                                                                                                                                                           3152
                                                                                                                                                                                                                                                                                                            3283 CCAATTCAAACTGTCTATGCACAAAATTCCCGTGGGCCTAGATGGAGATAATTTTTTT 3342
                                                                                                                                                                                                                                                                                                                                                                                            3402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3522
                      2912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3343 CTTCTCAGCTTTATGAAGAGAAGAGAAACTGTCTAGGATTCAGCTGAACCACCAGGAACC
                                                                                                        TCTACCTTAGAGCAAACCCAGTACCTCAGACAGGAAAGTCGGGGCTTTGACCACTACCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                 3403 TGGCAACATCACGATTTAAGCTAAGGTTGGGAGGCTAACGAGTCTACCTCCTTTGTA
                      TAGTGGTAAATCCAAGAGAAATGATCCTATCCAAAGCTGATTCACAAACCCACGCTCACC
                                        TAGTGGTAAATCCAAGAGAAATGATCCTATCCAAAGCTGATTCACAAACCCACGCTCACC
                                                                                      TGACAGCGAGGGACACGAGCATCACTCTGCTGGACGGACCATTAGGGGCCTTGCCAAGG
                                                                                                                                                          TCTACCTTAGAGCAAACCCAGTACCTCAGACAGGAAAGTCGGGGCTTTGACCACTACCAT
                                                                                                                                                                                                                         Arcregradececarrrreradecarrergaarageraderaderadecarecretrrreada
                                                                                                                                                                                                                                                                                         CTTCTCAGCTTTATGAAGAGAAAGGGAAACTGTCTAGGATTCAGCTGAACCACCAGGAACC
                                                                                                                                                                                                                                                                                                                                                                                                                              TGGCAACATCACGATTTAAGCTAAGGTTGGGAGGCTAACGAGTCTACCTCCTCTTTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 25, Application US/10377072
Publication No. US20040009501A1
GENERAL INFORMATION:
APPLICANT: Millennium Pharmaceuticals Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -10-377-072-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3273
                                                                                                                                                                                                                                                            3223
                                                                                                                                                                                                                                                                                                                                                             3153
                                                                                                                                                                                                                                                                                                                                                                                                                              3213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3463
                                                         3043
                                                                                        2913
                                                                                                                         3103
                                                                                                                                                          2973
                                                                                                                                                                                           3163
                                                                                                                                                                                                                           3033
                                                                                                                                                                                                                                                                                             3093
                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                        a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                     g
                                                                                     ò
                                                                                                                    g
                                                                                                                                                       8
                                                                                                                                                                                 g
                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                       엄
                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
```

403 436

283 316 343 463

496 523 556 583 616 643

919 703 736 763 196 823 856 883

Matches 3135; Conservative 0; Mismatches 0; Indels 165; Gaps 2; Qy 197 GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGGAAAGGTAAAGATGATGTAATG 256 Db 224 GCTTTCAGTCCAGTGTAAAGCTGTTGGGAGCGCGGGAGCAAAGGTAATGTAATG 283 Qy 257 CGCTGGCTGCTCCAAAGCATCTTTTGTTGTGGAATGGTTATTCCAGTCATCTTTATGA 316 Db 284 CGCTGGCTGCTCCAAAGCATCTTTTGTTGTAGAATGGTTATTCCAGTCATCTTTTTTGTA 343 Qy 317 ATCAAATGTGAGGGCTGCTTTTGTGGAATGGTTATTCCAGTCATCAACGGAAA 376 Db 344 ATCAAATGTGAGGGCTGCTTTTGTGGACGGAGTCCTTTGCAAGACCACTCAACGGAAA 403	437 AGTOCCCCATCACTCACCCCAAATTACACTTTTACACCCCCCAAAATCACTTTTTCCC 463 444 ACTCCCCCATCACCCCAAACTCACTTTTACACCCCCAAAATCACTTTTTCC 56 445 ACTCCACCCATCACCCCAAACTCACTTTTACACCCCCAAAAACACTTTTACCCCTTTTCC 51 446 ACTCCACCCATCACTCACTCACCCCAAATTACACCCCCCAAAACACTTTTCC 56 447 ACACCACCATTACATCACTCCCCCAAATTACACCACCCAAAACACTTTTCC 51 547 ACACCACCATTACATCACTCCCCAAATTACAAACACTCACACAAAACATCACCCCTTTCC 61 547 ACACCACCATTACATCATCACTCCCCAAATTACAACACCCCTTACACCCCTTTCC 61 547 ACACCACCATTACATCACTCCCCCAAAATTACAAACACTCACACAAAACATCACACAAAACATCACACAAAAAA	OY 1053 TITIGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGAT 1112
3223 ATCTGGTAGCCCATTTTCTAGGCATTGTGAATAGGTAGGT		88.5%; Score 2950; DB 19; Length 3544; rity 95.0%; Pred. No. 0;

셤

```
1352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1304 GIGIICIAGIGCACIGITIAGCIGGGAICICCCGCICCGCCACCAICGCIAICGCTACA 1363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CACCCTGTGCCGACTCTGCTACCTCAGAGGCAGCAGCAGAAAGGCCCGTGCATCCCGCCA 1663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1064 CAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGC 1123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1004 AATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGC 1063
                                                                                                                                                                                                                                                                                                                                                                                                943
                 643
                                                     919
                                                                                           703
                                                                                                                                736
                                                                                                                                                                    763
                                                                                                                                                                                                         196
                                                                                                                                                                                                                                             823
                                                                                                                                                                                                                                                                                   856
                                                                                                                                                                                                                                                                                                                      883
                                                                                                                                                                                                                                                                                                                                                              916
                                                                                                                                                                                                                                                                                                                                                                                                                                     926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAAATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CACCCTGTGCCGACTCTGCTACCTCAGAGGCAGGACAAAGGCCCGTGCATCCCGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCGTGCCCACCGTGCCAGCCGTCGCTCGCTAGAGCAACCGCTGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           884 CTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ----AGGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACTITIATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACTITATCCCCGAGICTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGAACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGGAAAGTGGAACGGAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA
                                                                                                                                                    CITCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGATGCAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GIGITCHAGIGCACIGITTAGCIGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGATTA
TGGAAAGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA
                                                                                                                                  CATCCCACATITIGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC
                                                                                                                                                                                                           AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAAGGTTGACA
                                                                                                                                                                                                                                                                                     TIGATIGCAGICAGAAGGIIGIAGIIITACGAICAAAGCICCCAAGAIGIIGCCICTCICI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1053
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1473
                                                                                                                                                                                                                                                                                                                                                                                                                                       917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    993
                       584
                                                                                               644
                                                                                                                                    677
                                                                                                                                                                        704
                                                                                                                                                                                                           737
                                                                                                                                                                                                                                                   764
                                                                                                                                                                                                                                                                                       797
                                                                                                                                                                                                                                                                                                                          824
                                                                                                                                                                                                                                                                                                                                                                857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                 g
                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                            ò
                                                                                                                                                                a
                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                      요
                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                           જે
                                                                                                  US-10-35/-930-2024, Application US/10357930

Sequence 20824, Application US/10357930

Sublication No. US20040259086A1

GENERAL INFORMATION:
APPLICANT: Schlegel. Robert
APPLICANT: Endege, Wilson
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
TITLE OF INVENTION: HUMAN PROSITE CANCER
TITLE OF INVENTION: HUMBER: 09/785,276
CURRENT APPLICATION NUMBER: 09/785,276
FRIOR APPLICATION NUMBER: 60/183,319
PRIOR FILING DATE: 2000-02-17
FRIOR APPLICATION NUMBER: 60/183,319
PRIOR FILING DATE: 2000-03-16
FRIOR APPLICATION NUMBER: 60/201,314
FRIOR APPLICATION NUMBER: 60/211,314
FRIOR FILING DATE: 2000-06-09
FRIOR APPLICATION NUMBER: 60/219,007
FRIOR APPLICATION NUMBER: 60/219,007
FRIOR APPLICATION NUMBER: 60/219,007
FRIOR FILING DATE: 2000-07-18
FRIOR FILIN
                       3522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGC 496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TIGICATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGC 616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACACCACCATTACATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGACTTATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 344 ATCAAATGTGAGGGGCTGCTTTGTGGACGAGTCCTTTGCAAGAGCACTTCAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAGAAAAGAGACATTCACTTGGAGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTGCC
 CGCTCGCTGCTCCAAACCATCTTTTGTTGTGGAATGGTTATTCCAGTCATCTTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGTCACCACCACCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGGGCAAAGGTAAAGAATGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              224 GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGGGCAAAGGTAAAGAATGATGTAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATCAAATGTGAGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       165;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 5145;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 2950; DB 20;
Pred. No. 0;
0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: misc feature
LOCATION: 1, 5144, 5145
OTHER INFORMATION: n = A,T,C or '
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 95.0%;
Matches 3135; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-357-930-20824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       464
```

g

8

a

ద ò

ò

g

ò

ò ద 셤 8

ઠે

2004	RESULT 12 US-10-357-910-20569 is Sequence 20969, Application US/10357930 j Sequence 20969, Application No. US20040259086A1 general information No. US20040259086A1 general information No. US20040259086A1 j APPLICANT: Schlegel. Robert APPLICANT: Endege, Wilson APPLICANT: Monahan, John TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND THERAPY OF TITLE OF INVENTION: HUMAN PROSTATE CANCER TITLE OF INVENTION: UNMBER: US/10/357,930 CURRENT APPLICATION NUMBER: 00/786,276 PRIOR APPLICATION NUMBER: 60/183,319 PRIOR PRILING DATE: 2003-02-16 PRIOR PRILING DATE: 2000-02-16 PRIOR PRILING DATE: 2000-02-16 PRIOR PLILING DATE: 2000-03-16 PRIOR PLILING DATE: 2000-03-16 PRIOR FILING DATE: 2000-03-16 PRIOR FILING DATE: 2000-03-16 PRIOR FILING DATE: 2000-03-16 PRIOR FILING DATE: 2000-05-25 PRIOR FILING DATE: 2000-05-25 PRIOR FILING DATE: 2000-05-25
1533 GCCTGCCGCCGCCCCCCCCCCCCCCCCCCTTTAGACCCCCCCC	

```
1772
                                                                                                                                                                                                                                                                                                             1412
                                                                                                                                                                                                                                                                                                                                              1472
                                                                                                    1052
                                                                                                                                     1112
                                                                                                                                                       1303
                                                                                                                                                                                        1363
                                                                                                                                                                                                        1232
                                                                                                                                                                                                                                          1292
                                                                                                                                                                                                                                                                           1352
                                                                                                                                                                                                                                                                                                                              1603
                                                                                                                                                                                                                                                                                                                                                                                                1723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITIAICICCACIGCAICGAAGIGGGAGCGIGGAGGACAAITACCACACCAGCIICCIIT 1952
                                                                                  1183
                1063
926
                                                                 1664 GCGTGCCCAGCGTGCCCAGCGTGCTCGCTGTTAGAGGACAGCCCGCTGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                            CCTTCTCTCTGGAIATCAAATCAGTTTCAGCCAGCATGCATGCATCCTTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GICCIGATAAGGAGGAGGAGCAGCAICCCCAAGAAGCIGCAGACCGCCAGGCCITCAGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCCAGAGCAAGCATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCCAGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACTGCCCCAGAGGTCCC
               AATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGC
                                                                                                                                               GIGITICIAGIGCACIGITIAGCIGGGAICICCCGCICCGCCACCACCATCGCIAACA
                                                                                                                                                                                                                  CAAATGAACCTGCTGCTGTCTCAGAGGGTGGACAGAAAAGGGGAGAGACGCCCTCAGTC
                                                                                                                                                                                                                                                                                                                               CAAATGAACCTGTCCCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCTCAGTC
                                                  CAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGC
                                                                                                                                      TTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCCAAAAGCCTCCAATGGAT
                                                                                                                                                                        GTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACA
                                                                                                                                                                                                          GCGTGCCCAGCGTGCCAGCGTGCAGCCGTCGTTAGAGGACAGCCCCGCTGGTACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                  CGCTCAGTGGGGTGCACTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1893
                                                                                                                                                                                                                                                                            1293
                                                                                                                                                                                                                                                                                                                                                                 1604
                                                                                                                                                                                                                                                                                                                                                                                                                                   1724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1653
                                                                                                                      1184
                                                                                                                                                                                                          1173
                                                                                                                                                                                                                           1364
                                                                                                                                                                                                                                            1233
                                                                                                                                                                                                                                                            1424
                                                                                                                                                                                                                                                                                              1484
                                                                                                                                                                                                                                                                                                               1353
                                                                                                                                                                                                                                                                                                                               1544
                                                                                                                                                                                                                                                                                                                                                1413
                                                                                                                                                                                                                                                                                                                                                                                  1473
                                                                                                                                                                                                                                                                                                                                                                                                                   1533
                                                                                                                                                                                                                                                                                                                                                                                                                                                     1593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1904
                                                   1064
                                                                    933
                                                                                    1124
                                                                                                      993
                                                                                                                                       1053
                                                                                                                                                                         1113
                                                                                                                                                                                          1304
 927
                                  927
                                                                                                                                                                                                    & g
                                                                                                                                                                                                                                         8 8 8
                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                            දු පු
                                                                                                                                                                                                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                    g
                                                                                                                                                    셤
                                                                                                                                                                   ò 8
                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                            ò
                                              g
                                                                   à
                                                                                셤
                                                                                                 ò
                                                                                                                                 ે
           ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCTGCTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAA 1003
                                                                                                                                                                 ñ
                                                                                                                                                                                                   283
                                                                                                                                                                                                                    316
                                                                                                                                                                                                                                   343
                                                                                                                                                                                                                                                                                      436
                                                                                                                                                                                                                                                                                                      463
                                                                                                                                                                                                                                                                                                                        496
                                                                                                                                                                                                                                                                                                                                        523
                                                                                                                                                                                                                                                                                                                                                         556
                                                                                                                                                                                                                                                                                                                                                                                           616
                                                                                                                                                                                                                                                                                                                                                                                                           643
                                                                                                                                                                                                                                                                                                                                                                                                                            919
                                                                                                                                                                                                                                                                                                                                                                                                                                            703
                                                                                                                                                                                                                                                                                                                                                                                                                                                              736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTC 916
                                                                                                                                                                                                                                                                    403
                                                                                                                                                                                                                                                                                                                                                                         583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCGATTCAGCGAAACATAAGGTTGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TIGATICCAGICAGAAGGITGIAGITTACGAICAAAGCICCCAAGAIGITGCCTCICT
                                                                                                                                                                                           224 GCTTTCAGTCCCAGTGTAAAGCTGTTGGAGCGCGGGGAGCAAAGGTAAAGAATGATGTAATG
                                                                                                                                                                                                                  CGCTGGCTGCTCAAAGCATCTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGA
                                                                                                                                                                                                                                                                                     ACACCACCATTACATCATCGTGGCGAAATTAAAGAAGGAGGTGGGGAAAAGAGGACTTTTTTT
                                                                                                                                                                                                                                                                                                                                                                                                   GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGTAATG
                                                                                                                                                                                                                                                    ATCAAATGTGAGGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA
                                                                                                                                                                                                                                                              AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGC
                                                                                                                                                                                                                                                                                                                                 ACACCACCATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGACTTATTG
                                                                                                                                                                                                                                                                                                                                                                                          TTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGGTTGGTGGCTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                            TGGAAAGTGGAAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                              CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                 165;
                                                                                                                                               Length 5145;
                                                                                                                                                                 Indels
                                                                                                                                                                .;
0
                                                                                                                                                20;
                                                                                                                                              Score 2950; DB Pred. No. 0; 0; Mismatches
                                                    4.0
PRIOR FILING DATE: 2000-06-09
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR FILING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR FILING DATE: 2000-12-13
NUMBER OF SEQ ID NOS: 62232
SOFTWARE: FSEGSEG for Windows Version 4.1
LENGTH: 5145
                                                                                                                       Ü
                                                                                                                        or
                                                                           TYPE: DNA

CREALISM: Homo sapiens
FEATURE:
NAME/KEY: misc feature
LOCATION: 1, 5144, 5145

OTHER INFORMATION: n = A,T,C or
US-10-357-930-20069
                                                                                                                                                88.5%;
95.0%;
                                                                                                                                              Query Match
Best Local Similarity 95.0
Matches 3135, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                              677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    917
                                                                                                                                                                                                                                     284
                                                                                                                                                                                                                                                                                                                                         464
                                                                                                                                                                                                                                                                                                                                                                           524
                                                                                                                                                                                                                                                                                                                                                                                                                            617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   824
                                                                                                                                                                                  197
                                                                                                                                                                                                                    257
                                                                                                                                                                                                                                                      317
                                                                                                                                                                                                                                                                      344
                                                                                                                                                                                                                                                                                      377
                                                                                                                                                                                                                                                                                                       404
                                                                                                                                                                                                                                                                                                                        437
                                                                                                                                                                                                                                                                                                                                                         497
                                                                                                                                                                                                                                                                                                                                                                                            557
                                                                                                                                                                                                                                                                                                                                                                                                                                         QQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                    엄
                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                          S
P
                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                  ò
                                                                                                                                                                                                   셤
                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                 õ
                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                       ò
```

2023

1652

1532

1172

1423

1483

දු පු

343

g

g

g ò

요 ò 셤 ò

ઠે

g

ò

q

ð

셤

ਨੇ

셤

ò П

ઠે

283

376 403 436 463 496 523 556

```
944 ACCIGCITGCAGGIGGGITIGCIGAGITCICCITGTITICCCIGGCCICGIGAAGGAA 1003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1004 AATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGC 1063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1064 CAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGA 1123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGGAAAGTGGAACGGAAAAAGTGCTGATTGATAGCCGCCATTTGTGGAATACAATA 676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA 796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTC 916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      764 AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGCTGCTCCAAAGCATCTTTTGTTGTGGAATGGTTATTCCAGTCATCTTTATGA
                                                                                                                                                                                                                                                                                                                                      284 CGCTGGCTCCTCAAAGCATCTTTTTTTTTTGTGGAATGGTTATTCCAGTCATCTTTATGA
                                                                                                                                                                                                                                                                                                                                                                                            ATCAAATGTGAGGGGTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACACCACCATTACATCATCGTGGCAAATTAAAGAAGGAGGGGGAAAAGGAGGCTTATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACACCACCATTACATCATCGTGGCAAATTAAAGAAGGAGGGGGGGAAAAGAGGGACTTATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TIGICALGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  884 CTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTC
                                                                                                                                                                                                                                                               AGTCA CCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGC
                                                                                                                                                                                                                                          197 GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGATG
                                                                                                                                                                                                       Indels 165;
                                                                                                                                                                Length 5145;
                                                                                                                                                                  DB 20;
                                                                                                                                                                                                       ö
                                                                                                                                                                Score 2950; DB Pred. No. 0; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               917 ACCIGCITGC------
i LENGTH: 5145
i TYPE: DNA
i ORGANISM: Homo sapiens
i; FEATURE:
i NAME/KEY: misc_feature
i; LOCATION: 1. 5144, 5145
i; OTHER INFORMATION: n = A,T,C or G
US-10-357-930-21303
                                                                                                                                                                Query Match 88.5%;
Best Local Similarity 95.0%;
Matches 3135; Conservative C
                                                                                                                                                                                                                                                                                                                      257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       927
                                                                                                                                                                                                                                                                                                                                                                                                317
                                                                                                                                                                                                                                                                                                                                                                                                                                       344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 15

19-10-357-930-21303

1 Sequence 21303, Application US/10357930

1 Publication No. U320040259086A1

2 GENERAL INFORMATION:

APPLICANT: Endege, wilson

APPLICANT: Endege, wilson

TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR

TITLE OF INVENTION: HUMAN PROSITE CANCER

TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, AND THERAPY OF

TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR

TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR

TITLE OF INVENTION: NOVER: 2003-02-04

FILE REFERENCE: MRI-0078CN

CURRENT FILING DATE: 2003-02-04

PRIOR FILING DATE: 2000-02-17

PRIOR PRILOR DATE: 2000-02-17

PRIOR FILING DATE: 2000-02-17

PRIOR FILING DATE: 2000-02-17

PRIOR FILING DATE: 2000-06-05

PRIOR FILING DATE: 2000-06-05

PRIOR FILING DATE: 2000-06-09

PRIOR FILING DATE
                                                                                                                                                                                                                                            3032
                                                                                                                                                                                                                                                                                                                                                             3222
                                                                                                                                                                                                                                                                                                                                                                                                    3092
                                                                                                                                                                                                                                                                                                                                                                                                                                       3282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTTCTCAGCTTTATGAAGAAAGGGAAACTGTCTAGGATTCAGCTGAACCACCAGGAACC 3212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGGCAACATCACGATTTAAGCTAAGGTTGGGAGGCTAACGAGTCTACCTCCTCTTTGTA 3272
                                                                                                                                                                                                                                                                                                                        TAGTGGTAAATCCAAGAGAAATGATCCTATCCAAAGCTGATTCACAAACCCACGCTCACC
                                                                                                                                                                                         3043 TAGTGGTAAATCCAAGAGAAATGATCCTATCCAAAGGTGATTCACAAACCCACGCTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2923 GTTGTGCTACTAAGAGATCTCAAATATTAGTCTTTGTCCGGACCCTTCCATAGTAGTACCT
                                                                                               3033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3463
                                                                                                 2793
                                                                                                                                                                           2853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3153
```

583

616 643 736 763

3283 CCAATTCAAACTGTCTATGCACAAAATTCCCGTGGGCCTAGATGGAGATAATTTTTTTT	3153 CTTCTCAGCTTTATGAAGAGAGAGAACTGTCTAGGATTCAGCTGAACCACCAGGAACC 3212	CTTCTCAGCTTTATGAAGAAGGGAAACTGTCTAGGATTCAGCTGAACCACCAGGAACC 3402	3213 TGGCAACATCACGATTTAAGCTAAGGTTGGGAGCTAACGAGTCTACCTCCTCTTTGTA 3272	3403 TGGCAACATCACGATTTAAGGTAAGGTTGGGAGGCTAACGAGTCTACCTCCCTC	3273 AATCAAAGAATTGTTTAAAATGGGATTGTCAATCCTTTAAATAAA	3463 AATCAAAGAATTGTTTAAAATGGGATTGTCAATCCTTTAAATAAA
883 CCAATTCAAACTGTCTATGCACAAAATTCCC	153 CTTCTCAGCTTTATGAAGAGAAGGGAAACTG	3343 CTTCTCAGCTTTATGAAGAGAAGCGAAACTG	213 TGGCAACATCACGATTTAAGCTAAGGTTGGGAGGCTAACGAGTTTATC	103 TGGCAACATCACGATTTAAGCTAAGGTTGGG	273 AATCAAAGAATTGTTTAAAATGGGATTGTC	163 AATCAAAGAATTGTTTAAAATGGGATTGTC
32£	y 31£	b 334	у 32:	Db 34(у 32'	b 34(
۵	Ø		O	Ω	ø	

Search completed: September 1, 2005, 11:36:52 Job time: 2092 secs

This Page Blank (uspto)

```
Command line parameters:
-MODEL=frame+ p2n.model - DEV=xlh
-O-Cap2 1/USPTO spool/US09964277/runat_31082005_120238_8524/app_query.fasta_1.711
-O-Cap2 1/USPTO spool/US09964277/runat_31082005_120238_B524/app_query.fasta_1.711
-DB=Published Applications NA - OFWT=fastap - SUFFIX=rnpb - MINMATCH=0.1
-LOOPCL1=0 - LOOPENXT=0 - UNITS=bits - START=1 - END=-1 - MATRIX=blosum62
-TRANS=human40.cdi _LIST=45 - DOCALIGN=200 - THR_SCORE=pct - THR_MAX=10
- MAX_EN=200000000 - USER=US09964277 GCGN 1 1 480 @runat_31082005_120238_8524
- NCPUS= - ICPP1=3 - NO MMAP - LARGEQUERY - NGG SOORS=0 - WAIT - DSPBLOCK=100
- NORLOGICG - DEV TIMEOUT=120 - WARN TIMEOUT=30 - THREADS=1 - KGAPOP=10 - KGAPEXT=0.5
- FGAPOP=6 - FGAPEXT=7 - YGAPOP=10 - YGAPEXT=0.5 - DELOP=6 - DELEXT=7
                                                                                                                                                                                                                                                                                        September 1, 2005, 11:02:30 ; Search time 957 Seconds (without alignments) 3537.918 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Published Applications NA:*

1: /cgn2_6/ptodate/2/pubpna/USO7_PUBCOMB.seq:*
2: /cgn2_6/ptodate/2/pubpna/USO7_PUBCOMB.seq:*
3: /cgn2_6/ptodate/2/pubpna/USO6_DUBCOMB.seq:*
4: /cgn2_6/ptodate/2/pubpna/USO6_PUBCOMB.seq:*
5: /cgn2_6/ptodate/2/pubpna/USO7_NEW PUB.seq:*
6: /cgn2_6/ptodate/2/pubpna/USO7_NEW PUB.seq:*
7: /cgn2_6/ptodate/2/pubpna/USO7_NEW PUB.seq:*
8: /cgn2_6/ptodate/2/pubpna/USO9_PUBCOMB.seq:*
9: /cgn2_6/ptodate/2/pubpna/USO9_PUBCOMB.seq:*
10: /cgn2_6/ptodate/2/pubpna/USO9_PUBCOMB.seq:*
11: /cgn2_6/ptodate/2/pubpna/USO9_PUBCOMB.seq:*
12: /cgn2_6/ptodate/2/pubpna/USO9_PUBCOMB.seq:*
13: /cgn2_6/ptodate/2/pubpna/USO9_PUBCOMB.seq:*
14: /cgn2_6/ptodate/2/pubpna/USO9_PUBCOMB.seq:*
15: /cgn2_6/ptodate/2/pubpna/USO9_PUBCOMB.seq:*
16: /cgn2_6/ptodate/2/pubpna/USO9_PUBCOMB.seq:*
16: /cgn2_6/ptodate/2/pubpna/USO9_PUBCOMB.seq:*
16: /cgn2_6/ptodate/2/pubpna/USO9_PUBCOMB.seq:*
17: /cgn2_6/ptodate/2/pubpna/USO9_PUBCOMB.seq:*
18: /cgn2_6/ptodate/2/pubpna/USO9_PUBCOMB.seq:*
19: /cgn2_6/ptodate/2/pubpna/USO9_PUBCOMB.seq:*
10: /cgn2_6/ptodata/2/pubpna/USO9_PUBCOMB.seq:*
10: /cgn2_
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-964-277-21
2668
1 MLPLSLQTVFSLYFWVNWRR......LGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14677368
GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                OM protein - nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 7338684 segs, 3274456166 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Database
                                                                                                                                                                                                                                                                                                        Run on:
```

Pred. No. is the number of results predicted by chance to have a

score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Ř	esult No.	Score	* Query Match	Ę	DB		Description
	-	ເດ		3332		US-09-964-277	Sequence 20, Appl
	7	LO '		1998	6	19-816-494-3	equence 3
	с	ທເ		1998	17	10-377-072-2	
	4° u	n w		2102	ן ר	10-094-749-	
	nω	ດທ		2732	18	10-168-506-2	
	7	LO !		2732	21	10-838-181-2	
	 0	2606	97.7	2966	9 7	US-10-296-115-520 TS-10-257-026-1	Sequence 1, Appli
	10	സ		3496	9 0	9-964-277-1	H
	11	ശ		3521	20	US-10-370-7	Sequence
	12	S t		3544	φ,)9-816-494-1 10 227 022 2	
	13	ഗ		3544	1 6	10-377-072-2	25.
	15	യ		3625	18	10-425-114-2	2623
	16	ശ		3766	18	10-343-357-17	17,
	17	·ω		4790	19	10-648-593-115	Sequence 115, App
	9 7	oυ		5145	2 6	.10-357-930-2082	2096
	20	9		5145	200	10-357-930-2107	210
	21	w		5145	20	-10-357-930-2108	2108
	22	•		5145	20	-10-357-930-2130	213(
	23	ωι		5145	2 0	-10-357-930-2130 -10-357-930-2282	228
	2.5	D W		5145	0 0	.10-357-930-2666	266
	56	w		5145	20	.10-357-930-2681	268]
	27	w		5145	200	-10-357-9	269
	8 6	w.		5145	2 5	-10-35/-930-2692	2717
	7 6	υv		5145	200	-10-357-930-2714	2714
	31	, Ψ		5145	20	-10-357-930-2867	2867
	32	u)		5450	22	-10-029-345A-1	108,
	33	u) i		5450	22	-10-029-345A-1	14
	ж 4. г	2, 0		2200	7 6	-10-029-345A-4 -10-072-012-25	255,
	9 6	2 5		2071	1 6	-10-072-012-25	257,
	37	ı uı		2756	22	-10-029-345A-113	113,
	38	643		1916	17	-10-108-260A-24	2429
	33	844		2377	7 5	-TO-2/8-698-16	7 6 7
	4. 4 0. L	* 0	30.0	2453	13.	-10-005-858-1	1, 4
	4 4	10	30.3	2476	18	-10-220-120-28	28,
	•	0		425	20	-10-357-930-1071	1071
	C 44	703	26.3	467	20	-10-357	3190
	4.	0	26.3	467	20	-10-357-930-4086	408
						ALIGNMENTS	
_	RESULT						
_	96-60-SD	64-277-2	00	1	0		
	; Seque:	Sequence 20, Applical Patent No. US2002013	20, Applicat . US20020137	1170A	US/0996 1	471	
		AL INFOR	MATION				
		ICANT: I	uche,	Ralf M.			
	; APPL	TITLE OF INVENTION: DSP-16 D	Wel, B	DSP-1	6 DUAL	AL-SPECIFICITY PHOSPHATASE	
		REFEREN	ICE: 20	0125.43	4		
	; CURR	ENT APPI	ICATIO	N NUMBE		US/09/964,277	
		ENT FILLI	NO DAI	OS: 22	701	1	
		WARE: Fa	BESEQ	for Win	ndows	Version 4.0	
		ID NO 20					
	TYPE	TH: 33	32				
	,,,						

0y 301 GinGluLeuSerGludInThrProGluThrSerProAspLysGluGluAlaSerIlePro 320 1742 CAGGAACTATCGGAGCAGACTCCCGAAACCAGCAGCAGCAGCAGCAGCACTCCCC 1801 0y 321 LysLysLeuGlnThrAlaArgProSerAspSerGlnSerLysArgLeuHisSerValArg 340 1802 AAGAAGCTGCAGACAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCA	Oy 481 GlnMetGlupheGlyGluSerIleMetSerGludsnArgSerArgGluGluLeuGlyLys 500 2282 CAAATGGAATTGGAAGACCATCAGGACAGGACAGGACAG
ORGANISM: Homo sapiens -09-964-277-20 ignment Scores: -08-257 batches: -09-064-277-20 cent Similarity: -00.004 mismatches: -09-064-277-21 MetLeuproLeuSerLeuGlnThrValPheSerLeuTyrPheTrpValAenTrpArgArg	121

8 8 8 8 8 8 8

ò

```
GENERAL INFORMATION:

APPLICANT: Millennium Pharmaccuticals Inc.

APPLICANT: Curtis, Rory A.J.

APPLICANT: Curtis, Rory A.J.

APPLICANT: Curtis, Rory A.J.

APPLICANT: Glauksmann, Maria A.

APPLICANT: Williamson, Mark J.

APPLICANT: Radolph-Owen, Laura A.

APPLICANT: Williamson, Mark J.

APPLICANT: Williamson, Mark J.

APPLICANT: Williamson, Mayoung

APPLICANT: Williamson, Mayoung

APPLICANT: Williamson, Wil
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1839
                                                                                                                                                                                                                                                                                                                                               1659
                                                                                                                                                                                                                                                                                                                                                                                                         485
                                                                                 345
                                                                                                                                                                                                                                                                                                            405
                                                                                                                                                                                                                                                                                                                                                                                                                                                              445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      465
                             1360 CAGACTCCCGAAACCAGTCCTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACC
                                                                                                                                                                               1600 CTGGGCCTTAAGGGCTGGCACTCGGATATCTTGGCCCCCCAGACCTCTACCCCTTCCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GICTATICIGIGGGCAGCCGCAGAAGCCAAGIGACAGAGCTGACTCGCGGGGGGGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ThralaGlnArgSerLeuLeuSerProLeuHisArgSerGlySerValGluAspAsnTyr
                                                                                                                                                                                                                                 HisThrSerPheLeuPheGlyLeuSerThrSerGlnGlnHisLeuThrLysSerAlaGly
                                                                                                                                                                                                                                                       LeuGlyLeuLysGlyTrpHisSerAspIleLeuAlaProGlnThrSerThrProSerLeu
                                                                                                                                                                                                                                                                                                                                                                                      ThrSerSerTrpTyrPheAlaThrGluSerSerHisPheTyrSerAlaSerAlaIleTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                              GlyGlySerAlaSerTyrSerAlaTyrSerCysSerGlnLeuProThrCysGlyAspGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ValTyrserValArgArgArgGlnLysProSerAspArgAlaAspSerArgArgSerTrp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HisGluGluSerProPheGluLysGlnPheLysArgArgSerCysGlnMetGluPheGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GluSerIleMetSerGluAsnArgSerArgGluGluLeuGlyLy8ValGlySerGlnSer
                                                                                 AlaargProSerAspSerGlnSerLysArgLeuHisSerValArgThrSerSerSerGly
           GlnThrProGluThrSerProAspLysGluGluAlaSerIleProLysLysLeuGlnThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 27, Application US/10377072 Publication No. US20040009501A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 3
US-10-377-072-27
                                                                                                                                                                                                                                                                                                                                                                                                                              1660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1900
                                                                                       326
                                                                                                                                                             346
                                                                                                                                                                                                                                       366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1960
                                                                                                                                                                                                                                                                                                                 386
               306
                                                                                                                                                                                                                                                                                                                                                                                         406
                                                                                                                                                  8 8
                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g y
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                      8 8 8
                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       225
                                                                                                                                                                                                                                                                                                519
                                                                                                                                                                                                                                                                                                                                                                          579
                                                                                                                                                                                                                                                                                                                                                                                                                                                  639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        999
                                                                      340
                                                                                                                                              399
                                                                                                                                                                                                                      459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LysAlaSerAsnGlyCysValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThr 105
                                                                                                                                                                                                                                                                                                                                                                                                               65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       85
                                                                                                                                                                                                                                                           29
                                                                                                                                                                                   29
                                                                                                                                                                                                                                                                                                                                       45
                                   20
                                                                                                           29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ThrThrLeuAspGlyThrAsnLysLeuCysGlnPheSerProValGlnGluLeuSerGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SerProLeuValGlnAlaLeuSerGlyLeuHisLeuSerAlaAspArgLeuGluAspSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AIGTIGCCTCTCTCTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAAAGA
                                                                                                                                                                                                                                                                                                                                                        GTCCTCAACAAGGAGCTGATGCAGCAGAATGGGATTGGTTAAATGCAGCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                  IlealallealaTyrIleMetLysArgMetAspWetSerLeuAspGluAlaTyrArgPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VallysGlulysArgProThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            820 GTGAAAGAAAAAAGACCTACTATATCTCCAAACTTCCAATTTTCTGGGCCAACTCCTGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGCACCTGGAGAAGCCAAATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ProValHisProAlaSerValProSerValProSerValGlnProSerLeuLeuGluAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AsnLysLeuLysArgSerPheSerLeuAspIleLysSerValSerTyrSerAlaSerMet
                                     MetLeuProLeuSerLeuGlnThrValPheSerLeuTyrPheTrpValAsnTrpArgArg
                                                                                                                                              ĠĊŕricaAċriċriĠrircAċċriĠċriĠca-GGrGGGTTTGCTGAGTTCTCTCGTTGTTTCCCT
                                                                                                                                                                                                                      GGCCTCTGTGAAGGAAAATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCT
                                                                                                                                                                                                                                                                                              460 GTTGCCAACATTGGGCCAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGAT
                                                                                                                                                                                                                                                                                                                                       ------GluLeuMetGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerAsn
                                                                                                                                                                                                                                                                                                                                                                                                                 ThrCysProLysProAspPhelleProGluSerHisPheLeuArgValProValAsnAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SerPheCysGluLysIleLeuProTrpLeuAspLysSerValAspPheIleGluLysAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    146 TyrGluLysLysIleLysAsnGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LeuHisLeuGluLysProAsnGluProValProAlaValSerGluGlyGlyGlnLysSer
                                                                                                           AlaSerThrLeuPheThrCysLeuGln-------
US-09-816-494-3 (1-1998)
 (1-517) \times
 -09-964-277-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                      280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             286
                                                                                                                                                                                                                          00
                                                                                                                                                                                                                                                                                                                                                                              520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     126
                                      ч
                                                                                                           21
                                                                                                                                                341
                                                                                                                                                                                     29
                                                                                                                                                                                                                                                               29
                                                                                                                                                                                                                                                                                                                                         30
                                                                                                                                                                                                                                                                                                                                                                                                                 46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           106
```

g

a

중 유

원 수 명

ያ ያ

8 8 8

8 è

엄

ઠે

요 &

ò

셤

Š

8

Š

Š

g

Š

939 185 999 205 1119

1179

245

1239

265

1359

325

305

285

1419

1479

345

1539

365

1599

405

1659

```
1300 ACTACTCTGGATGGGACCAACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                        | LeuGlyLeuLysGlyTrpHisSerAsplleLeuAlaProGlnThrSerThrProSerLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CATGAAGAGCCCCCTTTGAAAAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GluserilemetSerGluasnArgSerArgGluGluLeuGlyLysValGlySerGlnSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAGACGCCCCTCAGTCCACCCTGTGCCGACTCTGCTACCTCAGAGGCAGCAGCAGACAAAAG
                                                                                                                                                                           ProValHisProAlaSerValProSerValProSerValGlnProSerLeuLeuGluAsp
                                                                                                                                                                                       CCGTGCATCCCGCCAGCGTGCCCAGCGTGCCCAGCGTGCAGCGTGCAGCCGTCGCTGTTAGAGGAC
                                                                                                                                                                                                                                                                              AsniysLeulysArgSerPheSerLeuAspIleLysSerValSerTyrSerAlaSerMet
                                                                                                                                                                                                                                                                                              AlaArgProSerAspSerGlnSerLyaArgLeuHisSerValArgThrSerSerSerGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1420 GCCAGGCCTTCAGACAGCCAGAGCGATTGCATTGGGTCAGAACCAGCAGCAGCGGGGGG
                                                                                                                       GluThrProLeuSerProProCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArg
                                                                                                                                                                                                                                                                                                                                                                                      ThrThrLeuAspGlyThrAsnLysLeuCysGlnPheSerProValGlnGluLeuSerGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HisGluGluSerProPheGluLysGlnPheLysArgArgSerCysGlnMetGluPheGly
                                                                                                                                                                                                                                                                                  246 7
                                                                                                                                                                                                                                                                                                                                                                                        286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       386
                                                                                                                                                                                                     1060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    466
                                                                     166
                                                                                                                        186
                                                                                                                                                  1000
                                                                                                                                                                            206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           6 6 6 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        원
장
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     상 원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      $ g
                                                                                                                <u>ک</u> ۾
                                                                                                                                                                                                                                                 QQ
                                                                                                                                                                                                                                                                                                   g &
                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                              S S
                                                                                                                                                                                                                                                                                                                                                                                                                                  8 6 6 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                   8 6
                                                            ò
                                                                                      셤
                                                                                                                                                                           ò
                                                                                                                                                                                              g &
                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             879
                                                                                                                                                                                                                                                                                                                                                                                                                                                        399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGAAAGAAAAAAAGGCCTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGCCTCTGTGAAGGAAAATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTTGCCAACATTGGGCCAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SerPheCysGluLys1leLeuProTrpLeuAspLysSerValAspPheIleGluLysAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IlealallealaTyrIleMetLysArgMetAspMetSerLeuAspGluAlaTyrArgPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VallysGluLysArgProThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAsp
                                                                                                                                                                 PALM.
                                                                                                                                                                 or
                                                                                                                                                                Wrapper
                                                                                                                                                                                                                                                                                                                                   1998
516
0
1
56
                                                                                                                                                                File
                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-964-277-21 (1-517) x US-10-377-072-27 (1-1998)
                                                                                                                                                                 See
PRIOR APPLICATION NUMBER: US 09/843,297
PRIOR FILING DATE: 2001-04-25
PRIOR FILING DATE: 2000-04-26
PRIOR FILING DATE: 2000-04-26
PRIOR FILING DATE: 2000-04-26
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR FILING DATE: 2000-05-19
PRIOR FILING DATE: 2000-05-19
PRIOR FILING DATE: 2000-05-19
PRIOR FILING DATE: 2001-03-23
PRIOR FILING DATE: 2001-03-23
PRIOR FILING DATE: 2001-03-23
PRIOR FILING DATE: 2001-03-24
PRIOR FILING DATE: 2001-03-25
PRIOR FILING DATE: 2001-03-25
PRIOR FILING DATE: 2001-03-27
PRIOR FILING DATE: 2001-03-23
PRIOR FILING DATE: 2001-03-22
PRIOR FILING DATE: 2001-03-23
PRIOR FILING DAT
                                                                                                                                                                                                                                                                                                                                    4.43e-251
2606.00
90.21%
90.21%
97.68%
                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                         Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                86
                                                                                                                                                                                                                                                                                                                                         Pred. No.:
                                                                                                                                                                                                                                                                                                                                                   Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8 B 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   음 상 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
```

1779

445

1719

425

1839

465

485

1899

us-09-964-277-21.rnpb

	Qy 266 Alahy@LeuLy@ArgSerPheSerLeuAspIleLy@SerValSerTyrSerAlaSerMet 265 Db 1180 AATAAGCTCAAGCGTTCTTCTCTTCAATCCAGTTTCAACTCAGCAGCAGT 1239 Qy 266 AlaAlaSerLeuHisGlyPheSerSerSerGluAspAlaLeuGluTyrTyrLygProSer 285 Db 1240 GCAGCTCTTACATGCCTTCTCCACAAGATGCTTTCAAAACTTCCAAAACTTCC Cp 286 ThrThrLeuAspGlyThrAsnLygLeuCysGlnPheSerProValGluGluLeuSerGlu 305 Db 1300 ACTACTCTGGAAGGCTATGCCAGTTCTCCCCTGTTCAGGAACTTATCGGAG 1359 Db 1300 ACTACTCTGGAAGGCTAAGCCAGTTCTCCCCTGTTCAGGAACTATCGGAG 1359 Qy 306 GlnThrProGluThrSerProAspLygGluGluAlaSerTleProLygLygLeuGlnThr 325 Db 1360 CAGACTCCCGAAACCAGTCCTGATAAGGAGAGCCAGCAGCACCCCCAAGAAGCTGCAGAACT 1199 Qy 326 AlaArg9roSerAspSerGlnSerLysArgLeuHisSerValArgThrSerSerSerSerGly 345 345 Db 1420 GCCAGGCTTCAGAAGCCAGAAGCCAGAACGATTCGGTCAGAACCAGACAGCAGTGCC 1479
37, 49931 AND 49933 MOLECULES WRapper or PALM.	rgarg 20 Gaaga 340 29 TCCT 399
heserGlyserMetGluIleIleGluvalSer	NAME/AEST CDS 100ATION: (1) 1998

Alignment Scores: Pred. No.: Pred. No.: Score: Score: Percent Similarity: Percent Similarity: Percent Similarity: Po.21\$ Mismatches: Query Match: The state of th	Oy 1 MetLeuProLeuSerLeuGlnThrValPheSerLeuTyrPheTrpValAsnTrpArgArg 20 	Qy 21 AlaSerThrLeuPheThrCysLeuGln	Qy 29 29 Db 455 GGCCTCTGTGAAGAAAATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCT 514	Qy 29 29 Db 515 GTTGCCAACATTGGGCCAACCCTAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGAT 574	Oy 30GlubeuMetGlnGlnAsnGlyIleGlyTyrValbeuAsnAlaSerAsn 45	Qy 46 ThrCysProlysProhspPhelleProdluSerHisPheLeuargValProValAsnAsp 65	Qy 66 SerPheCysGluLysIleLeuProTrpLeuAspLysSerValAspPheIleGluLysAla 85	Qy 86 LysAlaSerAsnGlyCysValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThr 105 Db 755 AAAGCCTCCAATGGATGTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACC 814	Qy 106 IleAlaIleAlaTyrIleMetLysArgMetAspNetSerLeuAspGluAlaTyrArgPhe 125	Qy 126 ValLysGluLysArgFroThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAsp 145 Db 875 GTGAAAGAAAAAAGACCTACTATATCTCCAAACTTCCAGGCCAACTCCTGGAC 934	Qy 146 TyrGluLysLysIleLysAsnGlnThrGlyAlaSerGlyProLysSerLysLeu 165 Db 935 TATGAGAAGATTAAGAACCAGACTGGAGCATCAGGCCAAAGAGCAAAACTCAAGCTG 994	Qy 166 LeuHisLeuGluLySPrOASnGluProValProAlaValSerGluGlyGlyGlnLySSer 185 Db 995 CTGCACCTGGAGAAAGCCAAATGAACCTGTCCCTGCTGTCTCCAGAGGGTGGACAGAAAGC 1054	Qy 186 GluThrProLeuSerProProCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArg 205	Oy 206 ProvalHisProAlaSerValProSerValProSerValGinProSerLeuLeuGluAsp 225	Oy 226 SerProLeuValGlnAlaLeuSerGlyLeuHisLeuSerAlaAspArgLeuGluAspSer 245	Qy 246 AsnLysLeuLysArgSerPheSerLeuAspIleLysSerValSerTyrSerAlaSerMet 265
Qy 346 ThrAlaGlnArgSerLeuLeuSerProLeuHisArgSerGlySerValGluAspAsnTyr 365 bb 1480 ACCGCCAGAGGTCCCTTTATCTCCACTGCATGGAGGGCGTGAGAGTATTAC 1539 Qy 36 HisThrSerPheLeuPheGlyLeuSerThrSerGlnGlnHisLeuThrLysserAlaGly 385 bb 1540 CACACCAGCTTCTTTCGACAGCAGCAGCACCACCACAGAGTCTGCTGG 1599 Qy 386 LeuGlyLeuLysGTTTTTGGCTTTCCACCAGCAGCACCACCACACAGAGTCTGCTGG 1599 Qy 386 LeuGlyLeuLysGTTTTHTGGCTTTCCACCAGCAGCACCACCACAGAGTTTCCACTGG 1599 Qy 386 LeuGlyLeuLysGTTTTHTGSEASPILLININININININININININININININININININ	ThrserserTrpTyrPheAlaThrGluSerSerHisPheTyrSerAlaSerAla11eTyr 	Oy 426 GlyGlySerAlaSerTyrSerAlaTyrSerCysSerGlnLeuProThrCysGlyAspGln 445	Oy 446 ValiyrSerValArgArgGlnLysProSerAspArgAlaAspSerArgArgSerTrp 465	Qy 466 HisGluGluSerProPheGluLysGlnPheLysArgArgSerCysGlnMetGluPheGly 485	Oy 486 GluSerIleMetSerGluAsnArgSerArgGluGluLeuGlyLysValGlySerGlnSer 505	Qy 506 SerPheSerGlySerMetGluIleIleGluValSer 517 Db 1960 AGCTTTTCGGGCAGCATGGAAATCATTGAGGTCTCC 1995	RESULT 5 US-10-094-749-673 ; Sequence 673, Application US/10094749	2 6 H	; APFLICANT: OTSUKI, TETSUJI ; APPLICANT: SATO, HIROYUKI ; APPLICANT: SATO, HIROYUKI ; APPLICANT: ISHII, SHIZUKO	; APPLICANT: YAMAMOTO, JUN-ICHI ; APPLICANT: 15ONO, YUUKO ; APPLICANT: HIO, YURI ; APPLICANT: OTSUKA, KAORU	; APPLICANT: NAGAI, KEIICHI ; APPLICANT: IRIE, RYOTAKO ; APPLICANT: TAMECHIKA, ICHIKO ; APPLICANT: SEKI, NAOHIKO	; APPLICANT: YOSHIKAWA, TSUTOWU ; APPLICANT: OTSUKA, MOTOVUKI ; APPLICANT: NAGAHARI, KENJI ; APPLICANT: MASUHO, YASUHIKO	; TITLE OF INVENTION: NOVEL FULL-LENGTH CDNA ; FILE REFERENCE: 084335/016 ; CURRENT APPLICATION NUMBER: US/10/094,749 ; CURRENT FILING DATE: 2002-03-12	; PRIOR APPLICATION NUMBER: 60/350,435 ; PRIOR FILING DATE: 2002-01-24 ; PRIOR PPLICATION NUMBER: JP 2001-328381 ; PRIOR FILING DATE: 2001-09-14	; NUMBER OF SEQ ID NOS: 3381 ; SOFTWARE: PatentIn Ver. 2.1 ; SEQ ID NO 673 ; LENGTH: 2102	TYPE: DNA ; ORGANISM: Homo sapiens

```
29
                                                                                                                                                                                                                                                    29
                                                                                                                                                                                                        g
                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                             q
                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                 원
장
                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                       තු
                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                 엄
                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                               g
                                                                                                                                                                                         8
                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                             à
                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                              2376
                                                                                                                                                                                                                                                                                                                                         2436
                                                                                                                                                                                                                                                                                                                                                                    2496
                                                                                                                                                 2016
                                                                                                                                                                           2076
                                                                                                                                                                                                     2136
                                                                                                                                                                                                                                2196
                                                                                                                                                                                                                                                          2256
                                      1776
                                                                 1836
                                                                                           1896
                                                                                                                      1956
                                                                                                                                                                                        385
                                                     285
                                                                                                                                  345
                                                                                                                                                              365
                                                                                                                                                                                                                                             425
                                                                                                                                                                                                                                                                                                                                                       505
                                                                                                         325
                                                                                                                                                                                                                  405
                                                                                                                                                                                                                                                                       445
                                                                                                                                                                                                                                                                                                  465
                                                                                                                                                                                                                                                                                                                            485
                         AlaAlaSerLeuHisGlyPheSerSerGluAspAlaLeuGluTyrTyrLysProSer
                                                                              ThrThrLeuAspGlyThrAsnLysLeuCysGlnPheSerProValGlnGluLeuSerGlu
                                                                                     ThralaGlnArgSerLeuLeuSerProLeuHisArgSerGlySerValGluAspAsnTyr
                                                                                                                                                                     2017 ACCGCCCAGAGGTCCCTTTTATCTCCACTGCATCGAAGTGGGAGCGTGGAGGAAATTAC
                                                                                                                                                                                                                           CTGGGCCTTAAAGGGCTGGCACTCGGATATCTTGGCCCCCCAGACCTCTACCCTTCCCTG
                                                                                                                                                                                                                                                                                                  ValTyrSerValArgArgArgGlnLysProSerAspArgAlaAspSerArgArgSerTrp
                                                                                                                                                                                                                                                                                                         2377 CATGAAGAGGCCCCTTTGAAAAGCAGTTTAAACGCAGAAAGCTGCCAAATGGAATTTGGA
                                                                                                                                                                                                                                                                                                                                                       486 GluSerIleMetSerGluAsnArgSerArgGluGluLeuGlyLysValGlySerGlnSer
                                                            GCAGCATCCTTACATGGCTTCTCCTCATCAGAAGATGCTTTGGAATACTACAAAACCTTCC
                                                                                                                                                                                                                  LeuGlyLeuLysGlyTrpHisSerAspIleLeuAlaProGlnThrSerThrProSerLeu
                                                                                                                                                                                                                                                                                                                            HisGluGluSerProPheGluLysGlnPheLysArgArgSerCysGlnMetGluPheGly
                                                                                                                                                                                                                                                                                                                                                                                        SerPheSerGlySerMetGluIleIleGluValSer 517
                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 2, Application US/10838181
Publication No. US20050084877A1
GENERAL INFORMATION:
APPLICANT: PLOWMAN, GREGORY D.
APPLICANT: MARTIEZ, RICARDO
APPLICANT: MANNING, GERARD
APPLICANT: SUDAKSANAM, SUCHA
APPLICANT: FLANAGAN, PETER
                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 7
US-10-838-181-2
                                                                                                                                                                                                                                                                                                                             466
                                                                                                                                                                                                                    386
                                                                                                                                                                                                                                                                                                    446
                                                                                                                                                                                                                                                                                                                                                                                  909
                                                                                                                                                                                                                                 2137
                                        1717
                                                                  1777
                                                                                            1837
                                                                                                                      1897
              1657
                          246
                                                     266
                                                                               286
                                                                                                          306
226
                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                            원 상 원
                                                                                                                                                                                       8 6 8 6
                                                                                                                                                                                                                                             8 8 8
                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                         임
                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                              셤
                                    g
                                                    ò
                                                              g
                                                                           ઠે
                                                                                         요
                                                                                                         8
                                                                                                                    g
                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                       õ
                      ò
```

```
46 ThrCysProLysProAspPheIleProGluSerHisPheLeuArgValProValAsnAsp 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   997 GTTGCCAACATTGGGCCAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGAT 1056
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            937 GGCCTCTGTGAAGGAAATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCT 996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LeuHisLeuGluLysProAsnGluProValProAlaValSerGluGlyGlyGlnLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | IlealallealaTyrIleMetLysArgMetAspMetSerLeuAspGlualaTyrArgPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VallysGlulysArgProThr1leSerProAsnPheAsnPheLeuGlyGlnLeuLeuAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TyrGluLyslyslleLysAsnGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeuLysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLeullysLe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2732
516
0
1
56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length:
Matches:
Conservative:
Mismatches:
Indels:
TITLE OF INVENTION: MAMMALIAN PROTEIN PHOSPHATASES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21 AlaSerThrLeuPheThrCysLeuGln------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-964-277-21 (1-517) x US-10-838-181-2 (1-2732)
                        FILE REFERENCE: 038602/1351
CURRENT APPLICATION NUMBER: US/10/838,181
CURRENT FILING DATE: 2004-05-04
PRIOR PELICATION NUMBER: US/10/168,506
PRIOR FILING DATE: 2002-06-21
PRIOR FILING DATE: 2002-06-21
PRIOR FILING DATE: 2000-12-21
NUMBER OF SEQ ID NOS: 76
SOFTWARE: PATENTIN VET: 2.1
LENGTH: 2732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7e-251
2606.00
90.21%
90.21%
                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
ORGANISM: Homo sapiens
US-10-838-181-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Alignment Scores:
Pred. No.:
Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
```

29

29

877

20

1116

45

125

```
422 GGCCTCTGTGAAGGAAAATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCT 481
APPLICANT: Hyseq Inc
TITLE OF INVENTION: NO. US20040053248Alel Nucleic Acids and Polypeptides
FILE REFERENCE: 784PCT
CURRENT APPLICATION: NUMBER: US/10/296,115
CURRENT FILING DATE: 2002-11-18
PRIOR PPLICATION NUMBER: US09/488,725
PRIOR FILING DATE: 2000-01-21
PRIOR FILING DATE: 2000-01-21
NUMBER OF SEQ ID NOS: 1478
SEQ ID NO 520
LENGTH: 2966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       482 GTTGCCAACATTGGGCCAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   602 accrierccaaagccrigacrirrarccccgagrcricarriccrigcgreficacrigadargac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LysAlaSerAsnGlyCysValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11eAla11eAlaTyr11eMetLysArgMetAspMetSerLeuAspGluAlaTyrArgPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   126 VallysGluLysArgProThrileSerProAsnPheAsnPheLeuGlyGlnLeuLeuAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             46 ThrCysProLysProAspPhelleProGluSerHisPheLeuArgValProValAsnAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                182 AICGCTALCGCCTACAICATGAAGAGGAIGGACAIGTCTTTAGAIGAAGAAGGATTTT
                                                                                                                                                                                                                                                                                                                                                    MetLeuProLeuSerLeuGlnThrValPheSerLeuTyrPheTrpValAsnTrpArgArg
                                                                                                                                                                                                                                                                                                                                                                                                                363 GCTTCAACTCTGTTCACCTGCTTGCA-GGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ------GluLeuMetGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerAsn
                                                                                                                                                                                                                                              2966
516
0
1
56
                                                                                                                                                                                                                                                                                                                                                                                                                                                     25
                                                                                                                                                                                                                                              Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                               US-09-964-277-21 (1-517) x US-10-296-115-520 (1-2966)
                                                                                                                                                                                                                                                                                                                                                                                                     21 AlaSerThrLeuPheThrCysLeuGln-----
                                                                                                                                                                                                  a,t,c or
                                                                                                                                                                                                                                               7.89e-251
2606.00
90.21%
90.21%
97.68%
                                                                                                                                                                                      LOCATION: (1)...(2966)
OTHER INFORMATION: n =
                                                                                                                                          TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                               FEATURE:
NAME/KEY: misc_feature
                                                                                                                                                                                                                                                           Score:
Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29 -----
                                                                                                                                                                                                      ; OTHER INFORMA'
US-10-296-115-520
                                                                                                                                                                                                                                      Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                               303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       106
                                                                                                                                                                                                                                                                                                Query Match:
DB:
                                                                                                                                                                                                                                                   Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                    õ
                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                    1656
                                                                                                                   1716
                                                                                                                                          GINThrProgluthrSerProAspLysGluGluAlaSerIleProLysLysLeuGlnThr 325
                                                                                                                                                                                                                                                                                                                                                          2016
                                                                                                                                                                                                                                                                                                                                                                                                      2076
                                                                                                                                                                                                                                                                                                                                                                                                                                                     2136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2496
                                                                                                                                                                                                     225
                                                                                                                                                                                                                                                                                                                                  AlaArgProSerAspSerGlnSerLysArgLeuHisSerValArgThrSerSerGly 345
                                                                                                                                                                                                                                                                                                                                                                               ThralaGlnArgSerLeuLeuSerProLeuHisArgSerGlySerValGluAspAsnTyr 365
                                                                                                                                                                                                                                                                                                                                                                                                                             HisThrSerPheLeuPheGlyLeuSerThrSerGlnGlnHisLeuThrLysSerAlaGly 385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     485
                                                                                                                                                                                        285
                                                                                                                                                                                                                                       305
                                                                                             245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LeuGlyLeuLysGlyTrpHisSerAspIleLeuAlaProGlnThrSerThrProSerLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGGGCCTTAAGGCCTGGCACTCGGATATCTTGGCCCCCCAGACCTCTACCCTTCCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GlyGlySerAlaSerTyrSerAlaTyrSerCysSerGlnLeuProThrCysGlyAspGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGAGGCAGTGCCAGTTACTCTGCCTACAGCTGCCAGCTGCCCACTTGCGGAGACCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GluSerIleMetSerGluAsnArgSerArgGluGluLeuGlyLysValGlySerGlnSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ThrSerSerTrpTyrPheAlaThrGluSerSerHisPheTyrSerAlaSerAla11eTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ValTyrSerValArgArgArgArgGlnLysProSerAspArgAlaAspSerArgArgSerTrp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Grenarrengrececadecedadaaeceaagreacadagereactedecedecedageced
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CATGAAGAGCCCCTTTGAAAAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGA
                                                                                                            CACACCAGCTTCCTTTTCGGCCTTTCCACCAGCCAGCACCTCACGAAGTCTGCTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HisGluGluSerProPheGluLysGlnPheLysArgArgSerCysGlnMetGluPheGly
                                                              LS97 CCCGTGCATCCCGCCAGCGTGCCCAGCGTGCCCAGCGTGCAGCGTGCTTAGAGGAC
                                                                                              SerProLeuValGlnAlaLeuSerGlyLeuHisLeuSerAlaAspArgLeuGluAspSer
                                                                                                                                                                                        AlaAlaSerLeuHisGlyPheSerSerSerGluAspAlaLeuGluTyrTyrLy8ProSer
                                                                                                                                                                                                                                    ThrThrLeuAspGlyThrAsnLysLeuCysGlnPheSerProValGlnGluLeuSerGlu
   GluThrProLeuSerProProCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArg
                 ProValHisProAlaSerValProSerValProSerValGlnProSerLeuLeuGluAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SerPheSerGlySerMetGluIleIleGluValSer 517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-296-115-520
                                                                                                                                                                                                                                                               1837
                                                                                                                                                                                                                                                                                                              1897
                                                                                                                                                                                                                                                                                                                                     326
                                                                                                                                                                                                                                                                                                                                                                                                         2017
                                                                                                                                                                                                                                                                                                                                                                                                                                 366
                                                                                                                                                                                                                                                                                                                                                                                                                                                       2077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2497
                                                                                               226
                                                                                                                      1657
                                                                                                                                                                                           266
                                                                                                                                                                                                                                                                                        306
                                                                                                                                                                                                                                                                                                                                                                                   346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   909
                                                                                                                                                                                                                                         286
                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                             a
                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                         요
                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                    임
                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                 요
                                                                                                                                            8
                                                                                                                                                                                          ò
                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                    ò
                       셤
                                                ò
                                                                셤
                                                                                      ઠે
```

541

601

45

661 85 721

65

362

105

125 841

781

145

901

TyrGluLysLysIleLysBanGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeu 165

146

à

Sequence 520, Application US/10296115 Publication No. US20040053248A1

g δ g Š g

ò

8 B 8

g

8 8 8

g 9 9 8 %

9 P

8 8

유 성

ò g δ

```
TyrGluLysLyslleLysAsnGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeu 165
                                                                                                                                                                                                               Alignment Scores:
Pred. No.:
Score:
                                                                                                                                                                                                                                                                                                              н
                                                                                                                                                                                                                                                                                                                                                                                                                                                    586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       946
                                                                                                                                                                                                                                                                                                                                                   21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         146
                                                                                                                                                                                                                                                                                                                                                                                          29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            826
                                                                                                                                                                                                                                                                                                                                                                                                                                 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            46
                                                                                                                                                                FEATURE
                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                         PP
                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                               d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                성 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1861
                                                                                                                                                                                                                                                                                                                                                                                           1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1981
                                                                                                                                                                                             1261
                                                                                                                                                                                                                                                                        1381
                                                                                                                                                                                                                                                                                                              1441
                                                                                                                                                                                                                                                                                                                                                    1501
                                                                                                                                                                                                                                                                                                                                                                                                             1021
                                                                          1081
                                                                                                                                                                                                                                  1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                445
                                                                                              225
                                                                                                                                    245
                                                                                                                                                                                                                                                      305
                                                                                                                                                                                                                                                                                          325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             485
                                                                                                                                                                         265
                                                                                                                                                                                                               285
                                                                                                                                                                                                                                                                                                                                 345
                                                                                                                                                                                                                                                                                                                                                                        365
                                                                                                                                                                                                                                                                                                                                                                                                                                                    405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  505
                                                                                                                                   ThrThrLeuAspGlyThrAsnLysLeuCysGlnPheSerProValGluLeuSerGlu
                                                                                                                                                                                                                                                                                                                                                                                  CTGGGCCTTAAGGCTGGCACTCGGATATCTTGGCCCCCCAGACCTCTACCCTTCCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCAGCAGCTGGTATTTTGCCACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GlyGlySerAlaSerTyrSerAlaTyrSerCysSerGlnLeuProThrCysGlyAspGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGCACCTGGAGAAAGCCAAATGAACCTGTCCTGCTGTCTCAGAGGGTGGACAGAAAAGC
                                                                                                        CCCGTGCATCCCGCCAGCGTGCCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGAC
                                                                                                                                                                                     ACTACTCTGGATGGGACCAACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAG
                                                                                                                                                                                                                                                                                           GlnThrProGluThrSerProAspLysGluGluAlaSerIleProLysLysLeuGlnThr
                                                                                                                                                                                                                                                                                                      1382 CAGACTCCCGAAACCAGTCCTGATAAGGAGGAAGCCAGCAGCATCCCCAAGAAGCTGCAGAGC
                                                                                                                                                                                                                                                                                                                                          ThrSerSerTrpTyrPheAlaThrGluSerSerHisPheTyrSerAlaSerAlaIleTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ValTyrSerValArgArgArgGlnLysProSerAspArgAlaAspSerArgArgSerTrp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HisGluGluSerProPheGluLysGlnPheLysArgArgSerCysGlnMetGluPheGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CATGAAGAGCCCCTTTGAAAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGA
TATGAGAAGAAGATTAAGAACCAGACTGGAGCATCAGGGCCCAAAGAGCAAACTCAAGCTG
                                                                                              ProValHisProAlaSerValProSerValProSerValGlnProSerLeuLeuGluAsp
                                                                                                                                                                         AsnLysLeuLysArgSerPheSerLeuAspIleLysSerValSerTyrSerAlaSerMet
                                                                                                                                                                                                                                                                                                                                 AlaArgProSerAspSerGlnSerLysArgLeuHisSerValArgThrSerSerSerGly
                                                                                                                                                                                                                                                                                                                                                                         ThralaGlnArgSerLeuLeuSerProLeuHisArgSerGlySerValGluAspAsnTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                    LeuGlyLeuLysGlyTrpHisSerAspIleLeuAlaProGlnThrSerThrProSerLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGCTTTTCGGGCAGCATGGAAATCATTGAGGTCTCC 2017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SerPheSerGlySerMetGlullelleGluValSer 517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1922
                                                                                                                                                                                                                                                                         1322
                                                                                                                                                                                                                                                                                                                                                                                                                                                     386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         206
                                                                           1022
                                                                                                                1082
                                                                                                                                                                          246
                                                                                                                                                                                              1202
                                                                                                                                                                                                                 566
                                                                                                                                                                                                                                   262
                                                                                                                                                                                                                                                       286
                                                                                                                                                                                                                                                                                            306
                                                                                                                                                                                                                                                                                                                                   326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   486
                   166
                                    962
                                                       186
                                                                                              206
```

g

જે 셤 ò g

Db

ð

ઠે

```
Grgaaagaaaaaaagaccracrararcrccaaacrrcaarrrrcrgggggacrccrggac 1005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VallysGlulysArgProThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAsp 145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTTGCCAACATTGGGCCAACCCGAATTCTTCCCCAATCTTTATCTTGGCTGCCAGCGAGAT 645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LysAlaSerAsnGlyCysValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThr 105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SerPheCysGluLysIleLeuProTrpLeuAspLysSerValAspPheIleGluLysAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAAGCCTCCAATGGATGTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGGCTCGCCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                              MetLeuProLeuSerLeuGlnThrValPheSerLeuTyrPheTrpValAsnTrpArgArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         526 GGCCTCTGTGAAGGAAAATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ThrCysProlysProAspPhelleProGluSerHisPheleuArgValProValAspAsp
Sequence 1, Application US/10257026

Publication No. US20040086859A1

GRNERAL INFORMATION:

APPLICANT: Warck Patent GmbH

TITLE OF INVENTION: New dual specificity phosphatase

FILE REFERENCE: USUSPICKOWS

CURRENT APPLICATION NUMBER: US/10/257,026

CURRENT PILING DATE: 2003-11-07

NUMBER OF SEQ ID NOS: 3

SEQ ID NO 1

LENGTH: 3059
                                                                                                                                                                                                                                                                                                                   3059
516
0
1
56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-964-277-21 (1-517) x US-10-257-026-1 (1-3059)
                                                                                                                                                                                                                                                                                                                      8.26e-251
2606.00
90.21%
90.21%
97.68%
                                                                                                                                                                                                                                        ; NAME/KEY: CDS
; LOCATION: (127)..(2121)
US-10-257-026-1
                                                                                                                                                                                          TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
Query Match:
DB:
```

```
961 GGCCTCTGTGAAGGAAAATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCT 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                    1021 GTTGCCAACATTGGGCCAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGAT 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TyrGluLysLysIleLysAsnGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeu 165
                                                                                                                                                                                                                                                                                                                                                  LysklaSerksnGlyCysValLeuValHisCysLeuklaGlyIleSerkrgSerklaThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                106 IlealallealaTyrilemetLysArgMetAspMetSerLeuAspGluAlaTyrArgPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1321 ATCGCTATCGCCTACATCATGAAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                         30 ------GluLeuMetGlnGlnAsnGlyIleGlyTytValLeuAsnAlaSerAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      126 VallysGlulysArgProThrileSerProAsnPheAsnPheLeuGlyGlnLeuLeuAsp
                                                                                                                                                                                                                                                                                                    MetLeuProLeuSerLeuGlnThrValPheSerLeuTyrPheTrpValAsnTrpArgArg
                                                                                                                                                                                                            3496
516
0
1
56
                                                                                    PHOSPHATASE
2086 AGCTTTTCGGGCAGCATGGAAATCATTGAGGTCTCC 2121
                                                                                                                                                                                                                                Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                               US-09-964-277-21 (1-517) x US-09-964-277-1 (1-3496)
                                  Sequence 1, Application US/09964277
; Patent No. US20020137170A1
; GENERAL INFORMATION:
APPLICANT: Luche, Ralf M.
; APPLICANT: Wei, Bo
; TITLE OF INVENTION:
FILE REPERENCE: 200125.434
; CURRENT APPLICATION NUMBER: US/09/964,277
; CURRENT PILION DATE: 2001-09-25
; SOFTWARRE: FastESQ for Windows Version 4.0
; SEQ ID NO. 1.
                                                                                                                                                                                                               Length:
Matches:
                                                                                                                                                                                                                                                                                                                                         AlaSerThrLeuPheThrCysLeuGln-----
                                                                                                                                                                                                             16-250
2606.00
90.21%
90.21%
                                                                                                                                                               TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                        Score:
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                               29 -----
                                                                                                                                                                                                      Alignment Scores:
Pred. No.:
                                                                                                                                                      LENGTH: 3496
                      RESULT 10
US-09-964-277-1
                                                                                                                                                                                   US-09-964-277-1
                                                                                                                                                                                                                                                                                                                                         21
                                                                                                                                                                                                                                                                                                                                                                                                                     29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                146
                                                                                                                                                                                                                                                                                                      Н
                                                                                                                                                                                                                                                                                                                       842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                      Š
                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                              8 8
                                                                                                                                                                                                                                                                                                                                                                                                               ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
   a
                                                                                     1185
                                                                                                                           1245
                                                                                                                                                                 1305
                                                                                                                                                                                                                                              1425
                                                                                                                                                                                                                                                                           1486 CAGACTCCCGAAACCAGTCCTGATAAGAAGAAAGCAGCATCCCCAAGAAGCTGCAGACC 1545
                                                                                                                                                                                                                                                                                                                                                      1665
                                                                                                                                                                                                                                                                                                                                                                                                                                          1725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2085
                                                                                                                                                                                              465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          505
                                                                                                                                                                                    265
                                                                                                                                                                                                                                                                                                                                           345
                                                                                                                                                                                                                                                                                                                                                                                365
                                                                                                                                                                                                                                                                                                                                                                                                                       385
                                                                                                                                                                                                                                                                                                                                                                                                                                                             405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   425
                                                                                                                                              245
                                                                                                                                                                                                                          266 AlaalaSerLeuHisGlyPheSerSerGluAspAlaLeuGluTyrTyrLysProSer 285
                                                                                                                                                                                                                                                                                                      325
                                                                   205
                                                                                                                                                                                                                                                                ThrThrLeuAspGlyThrAsnLysLeuCysGlnPheSerProValGlnGluLeuSerGlu 305
                                                                                                                                                                                                                                                                                                                                                                                         1606 ACCGCCCAGAGGTCCCTTTTATCTCCACTGCATCGAAGTGGGAGCGTGGAGGACATTAC
                                                                                                                                                                                                                                                                                                                                                                                                                      CTGGGCCTTAAGGGCTGGCACTCGGATATCTTGGCCCCCCCAGACTCTTACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ThrSerSerTrpTyrPheAlaThrGluSerSerHisPheTyrSerAlaSerAla11eTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GlyGlySerAlaSerTyrSerAlaTyrSerCysSerGlnLeuProThrCysGlyAspGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ValTyrSerValArgArgArgGlnLysProSerAspArgAlaAspSerArgArgSerTrp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HisGluGluSerProPheGluLyeGlnPheLysArgSerCysGlnMetGluPheGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GluSerIleMetSerGluAsnArgSerArgGluGluLeuGlyLysValGlySerGlnSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AlaArgProSerAspSerGlnSerLy8ArgLeuHisSerValArgThrSerSerSerGly
                                                                                                                                                                                                                                                                                                                                                                                 ThralaglnargSerLeuLeuSerProLeuHisArgSerGlySerValGluAspAsnTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                             LeuGlyLeuLysGlyTrpHisSerAspIleLeuAlaProGlnThrSerThrProSerLeu
                                                                                                                                                                                                                                     CTGCACCTGGAGAAGCCCAAATGAACCTGTCCTGCTGTCTCTCAGAGGGTGGAAAAGC
                                                                                AsnlysLeulysArgSerPheSerLeuAspIleLysSerValSerTyrSerAlaSerMet
                               LeuHisLeuGluLysProAsnGluProValProAlsSerGluGlyGlyGlyGlnLysSer
                                                                    GluThrProLeuSerProProCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArg
                                                                                                         ProvalHisProAlaSerValProSerValProSerValGlnProSerLeuLeuGluAsp
                                                                                                                                              SerProLeuValGlnAlaLeuSerGlyLeuHisLeuSerAlaAspArgLeuGluAspSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SerPheSerGlySerMetGlulleIleGluValSer 517
                                                                                                                                                                                                                                                                                      1426
                                                                                                                                                                                                                                                                                                        306
                                                                                                                                                                                                                                                                                                                                              326
                                                                                                                                                                                                                                                                                                                                                                                   346
                                                                                                                                                                                                                                                                                                                                                                                                                          366
                                                                                                                                                                                                                                                                                                                                                                                                                                             1666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  206
                                                                                                           206
                                                                                                                                                                                                                                                                    286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       466
                                 166
                                                                      186
                                                                                                                                                226
                                                                                                                                                                                      246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                    원 참
                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                         g
                                                                                                                                                              셤
                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                       ď
                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                  g
                                                                                                          ò
                                                                                                                                                ò
                               ઠે
                                                ద
                                                                      ઠે
```

29

1440

8 6 8 6

8 8 8 8

8 B

5 B 5 B 5 B 5 B 5

```
ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                           Score:
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                   ; ORGANISM: Homo
US-10-370-715B-261
                                                                                                                                                                                                                                                                                                                                      Scores
                                                                                                                                                                                                                                                                      LENGTH: 3521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29
                                                                                                                                                                                                                                                                                     TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                . ov
                                                                                                                                                                                                                                                                                                                                    Alignment Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                2040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2520
                                                                                                                                                                                                                                              1800
                                                                                                                                                                                                                                                                                                                                                1920
                                                                                                                                                                                                                                                                                                                                                                                               1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2340
                                              1560
                                                                                               1620
                                                                                                                                               1680
                                                                                                                                                                                               1740
                                                                                                                                                                                                                                                                                               1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          465
                                                                                                                                                                       245
                                                                                                                                                                                                                                                                                                                       305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          485
                                                                                                                       225
                                                                                                                                                                                                                        265
                                                                                                                                                                                                                                                                      285
                                                                                                                                                                                                                                                                                                                                                                        325
                                                                                                                                                                                                                                                                                                                                                                                                                        345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGACGCCCCTCAGTCCACCCTGTGCCGACTCTGCTACCTCAGAGGCAGCAGCAGGAGAAAAGG
                                                                                                                                      CCCGTGCATCCCGCCAGCGTGCCCAGCGTGCCCAGCGTGCAGCCGTCGTTAGAGGAC
                                                                                                                                                                                    GCAGCATCCTTACATGGCTTCTCCTCATCAGAAGATGCTTTGGAATACTACAAAACCTTCC
                                                                                                                                                                                                                                                                                                                       ThrThrLeuAspGlyThrAsnLysLeuCysGlnPheSerProValGluLeuSerGlu
                                                                                                                                                                                                                                                                                                                                         GlnThrProGluThrSerProAspLysGluGluAlaSerIleProLysLysLeuGlnThr
                                                                                                                                                                                                                                                                                                                                                                                     AlahrgProSerAspSerGlnSerLygArgLeuHisSerValArgThrSerSerSerGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2101 CACACCAGCTTCCTTTTCGGCCTTTCCACCAGCCAGCACCTCACGAAGTCTGCTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGGGCCTTAAGGGCTGGCACTCGGATATCTTGGCCCCCCAGACCTCTACCCTTCCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2221 ACCAGCAGCTGGTATTTTTGCCACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTAC
TATGAGAAGAATAATAAGAACCAGACTGGAGCATCAGGGCCCAAAGAGAGCAAACTCAAGCTG
                                              GluThrProLeuSerProProCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArg
                                                                                                                      ProValHisProAlaSerValProSerValProSerValGlnProSerLeuLeuGluAsp
                                                                                                                                                                      SerProLeuValGlnAlaLeuSerGlyLeuHisLeuSerAlaAspArgLeuGluAspSer
                                                                                                                                                                                                                        AsnLysLeuLysArgSerPheSerLeuAspIleLysSerValSerTyrSerAlaSerMet
                                                                                                                                                                                                                                                                         AlaAlaSerLeuHisGlyPheSerSerSerGluAspAlaLeuGluTyrTyrLysProSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                1981 GCCAGGCCTTCAGACAGCCAGAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ThralacinargSerLeuLeuSerProLeuHisArgSerClySerValCluAspAsnTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HisThrSerPheLeuPheGlyLeuSerThrSerGlnGlnHisLeuThrLysSerAlaGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LeuGlyLeuLysGlyTrpHisSerAspIleLeuAlaProGlnThrSerThrProSerLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ThrSerSerTrpTyrPheAlaThrGluSerSerHisPheTyrSerAlaSerAlaIleTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VallyrSerValArgArgArgGlnLysProSerAspArgAlaAspSerArgArgSerTrp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HisGluGluSerProPheGluLysGlnPheLysArgArgSerCysGlnMetGluPheGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CATGAAGAGCCCCTTTGAAAAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGA
                        LeuHisLeuGluLysProAsnGluProValProAlaValSerGluGlyGlyGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGCTTTTCGGGCAGCATGGAAATCATTGAGGTCTCC 2556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SerPheSerGlySerMetGluIleIleGluValSer 517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2461
                                                                                                                                                                                                                                                                                                                                                                                                                           326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2521
1441
                                                                                                                                                                                                                        246
                                                                                                                                                                                                                                               1741
                                                                                                                                                                                                                                                                         266
                                                                                                                                                                                                                                                                                                                         286
                                                                                                                                                                                                                                                                                                                                                                        306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          206
                                               1501
                                                                                               1561
                                                                                                                                               1621
                                                                                                                                                                                                                                                                                                1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            486
                        166
                                                                         186
                                                                                                                       206
                                                                                                                                                                        226
```

g

ò

g

6 6 6 6 6

ò

임

g

δ

ò

```
1322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTCCTCAACAAGGAGCTGATGCAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAAT 1142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1023 GTTGCCAACATTGGGCCAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGAT 108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ------GluleuMetGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IlealailealaTyrileMetLysargMetAspMetSerLeuAspGluAlaTyrArgPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          963 GGCCTCTGTGAAGGAAATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SerPheCysGluLysIleLeuProTrpLeuAspLysSerValAspPheIleGluLysAla
                                                                                                                                                                                                                the Treatment of
                                                                                                                                                                                                                                                                                                                                                                                                                                         3521
516
0
1
56
                                                                                                                                                                                                                                                                                                                                                                                                                                           Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-964-277-21 (1-517) x US-10-370-715B-261 (1-3521)
                                                                                                                                                                                                                  Methods for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AlaSerThrLeuPheThrCysLeuGln-----
Sequence 261, Application US/10370715B
Publication No. US20040258678A1
GENERAL INFORMATION:
Patin Docket Preview
Patin Docket Preview
APPLICANT: BODARY, SARAH C.
APPLICANT: CLARK, HILLARY
APPLICANT: JACKANA, JANET
APPLICANT: JACKANA, JANET
APPLICANT: WILLIANY
APPLICANT: MILLIANY
APPLICANT: RESPECT, JILL R.
APPLICANT: WILLIANS, P. MICKEY
APPLICANT: WILLIANS, P. MICKEY
APPLICANT: WILLIANS, P. MICKEY
APPLICANT: WO, THOMAS D.
TITLE OF INVENTION: Compositions and Methods f
TITLE OF INVENTION: Related Diseases
FILE REFERENCE: P1948R1-US
CURRENT APPLICATION NUMBER: US/10/370,715B
CURRENT APPLICATION NUMBER: US/10/370,715B
SEQ ID NO 261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                           1.01e-250
2606.00
90.21%
90.21%
97.68%
```

```
988 GCCCTCTGTGAAGGAAAATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCT 1047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1048 GTTGCCAACATTGGGCCCAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGAT 1107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCITITIGIGAGAAAITITIGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCA 1287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ThrCysProLysProAspPheIleProGluSerHisPheLeuArgValProValAsnAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      66 SerPheCysGluLysIleLeuProTrpLeuAspLysSerValAspPheIleGluLysAla
DUAL SPECIFICITY
AND USES THEREFOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3544
516
0
1
56
                                                      Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-964-277-21 (1-517) x US-09-816-494-1 (1-3544)
                                                                                                                                RESULT 12
US-09-816-494-1
S-09-816-494-1
Sequence 1, Application US/09816494
Pacent No. US20020034807A1
GENERAL INFORMATION:
APPLICANT: MEYERS, Rachel A.
TITLE OF INVENTION: PHOSPHATASE MOLECULES AND
TITLE OF INVENTION: PHOSPHATASE MOLECULES AND
TITLE REPERENCE: 10448-030002
CURRENT APPLICATION NUMBER: US/09/816,494
CURRENT PILING DATE: 2001-03-23
PRIOR FILING DATE: 2000-03-24
NUMBER OF SEQ ID NOS: 10
SOFTWARE: FREESEQ for Windows Version 4.0
SEQ ID NO 1.3544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.02e-250
2606.00
90.21%
90.21%
97.68%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       29 -----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FRATURE:

NAME/KEY: CDS

; LOCATION: (589)...(2583)

US-09-816-494-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score:
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                      ò
                                                                                                                                                                                                                                                                                                                                             1682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GlnThrProGluThrSerProAspLysGluGluAlaSerIleProLysLysLysLuGluThr 325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2402
                                                                                                                                                                                                                                                                       1622
                                                                                                                                                                                                                                                                                                                                                                                      345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            465
                                                                                                                                                        185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ThrAlaGlnArgSerLeuLeuSerProLeuHisArgSerGlySerValGluAspAsnTyr 365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 505
                                                                                                                                                                                                                                                                                                                                                                                                                                                              265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ThrThrLeuAspGlyThrAsnLysLeuCysGlnPheSerProValGluGeuSerGlu 305
                                                                                                                                                                                                                                    205
                                                                                                                                                                                                                                                                                                            225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ThrSerSerTrpTyrPheAlaThrGluSerSerHisPheTyrSerAlaSerAla11eTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GlyGlySerAlaSerTyrSerAlaTyrSerCysSerGlnLeuProThrCysGlyAspGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HisGluGluSerProPheGluLysGlnPheLysArgSerCysGlnMetGluPheGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CATGAAGAGCCCCTTTGAAAAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GluSerIleMetSerGluAsnArgSerArgGluGluLeuGlyLysValGlySerGlnSer
                                                                                                                                                                                                                                                                                                          146 TyrGlulvslysllelysAenGlnThrGlyAlaSerGlyProLysSerLysLeulysLeulysLeulysLeulysLeulysLeulysLeulysLeulysLeulysLeulysLeulysLeulysSerlysLeulysSerlysSerLysSerLysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerlysSerly
                                                                                                                                                        GluThrProLeuSerProProCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArg
                                                                                                                                                                                                                                                         AsnlysLeulysArgSerPheSerLeuAspIleLysSerValSerTyrSerAlaSerMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          466
                                                                                                                                                                                                                                        186
                                                                                                                                                                                                                                                                             1563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        426
                                                                                                                                                              166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1923
```

g

Ś g ò

a y

ପ୍ ò

셤

8 8 õ 요 ઠે qq õ g

g

ઠે

g

ઠે

ઠે

셤 ઠે 셤 ò g 8 g Š g ð g ઠે g ò

```
Wellcation No. U82004000501A1

GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Curtis, Rory A.J.
APPLICANT: Curtis, Rory A.J.
APPLICANT: Curtis, Rory A.J.
APPLICANT: Curtis, Rory A.J.
APPLICANT: Gluckenan, Maria J.
APPLICANT: Gluckenan, Maria J.
APPLICANT: Radolph Owen, Laura A.
APPLICANT: Tasi, Porny Ying
ITILE OF INVENTION: 1000 SEE THRREOR
ITILE OF INVENTION: 1000 SEE THRREOR
ITILE OF INVENTION: 1000 SEE THREEOR
ITILE OF INVENTION: 1000 SEE THREEOR IN SEE THRE
GluSerIleMetSerGluAsnArgSerArgGluGluLeuGlyLysValGlySerGlnSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3544
516
0
1
56
                                                                                                                                                           2548 AGCTTTTCGGCCAGCATGGAAATCATTGAGGTCTCC 2583
                                                                                                                          506 SerPheSerGlySerMetGluIleIleGluValSer 517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-964-277-21 (1-517) x US-10-377-072-25 (1-3544)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1.02e-250
2606.00
90.21%
90.21%
97.68%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; LOCATION: (589)...(2586)
US-10-377-072-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Homo Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: Fast:
SEQ ID NO 25
LENGTH: 3544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alignment Scores:
                                                                                                                                                                                                 RESULT 13
US-10-377-072-25
                                                      486
                    2428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No.:
                                                                                     엄
                                                                                                                                                       g
                                                    ठे
                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2367
                                                                                                                                                                                                                                                                                                                        1647
                                                                                                                                                                                                                                                                                                                                                                                                                                                                1767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2127
                                                                                                           1467
                                                                                                                                                                               1527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1827
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gretarrergrececaegececeaagecaagecaagreacaegecreacreecegegegecree 2427
                                                                        145
                                                                                                                                                                                                                                    205
                                                                                                                                                                                                                                                                                                                                                                            2007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            465
                                                                                                                                                                                                                                                                                                                                                                                                                              245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ThrserserTrpTyrPheAlaThrGluSerSerHisPheTyrSerAlaSerAlaIleTyr 425
                                                                                                                                              165
                                                                                                                                                                                                                                                                                                                                                          225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ThrThrLeuAspGlyThrAsnLysLeuCysGlnPheSerProValGlnGluLeuSerGlu 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HisGluGluSerProPheGluLysGlnPheLysArgArgSerCysGlnMetGluPheGly 485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     186 GluThrProLeuSerProProCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                  1708 AGCCCGCTGGTACAGGCGCTCAGTGGGCTGCACTGTCCCGCAGACAGGCTGGAAGACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2128 CACACCAGCTTCCTTTTCGGCCTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCTGCTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2248 ACCAGCAGCTGGTATTTTGCCACAGAGTCCTCACATTCTACTCTGCCTCAGCCATCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GlyGlySerAlaSerTyrSerAlaTyrSerCysSerGlnLeuProThrCysGlyAspGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ValTyrSerValArgArgArgGlnLysProSerAspArgAlaAspSerArgArgSerTrp
                                                                                                                                                                  1468 TATGAGAAGAAGAAGAACCAGACTGGAGCATCAGGGCCAAAGAGAGCAAACTCAAGCTG
                                                                                                                                                                                                                 LeuHisLeuGluLysProAsnGluProValProAlaValSerGluGlyGlyGlyGlnLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                226 SerProLeuValGlnAlaLeuSerGlyLeuHisLeuSerAlaAspArgLeuGluAspSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     266 AlaAlaSerLeuHisGlyPheSerSerGluAspAlaLeuGluTyrTyrLysBroSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GlnThrProGluThrSerProAspLysGluGluAlaSerIleProLysLysLeuGlnThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AlaArgProSerAspSerGlnSerLysArgLeuHisSerValArgThrSerSerGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HisThrSerPheLeuPheGlyLeuSerThrSerGlnGlnHisLeuThrLysSerAlaGly
       IleAlaIleAlaTyrIleMetLysArgMetAspMetSerLeuAspGluAlaTyrArgPhe
                             146 TyrGluLysLysleLysAsnGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeu
                                                                                                                                                                                                                                                                                                                                                          ProValHisProAlaSerValProSerValProSerValGlnProSerLeuLeuGluAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AsnlysleulysArgSerPheSerLeuAspIleLysSerValSerTyrSerAlaSerMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1948 CAGACTCCCGAAACCAGTCCTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2008 GCCAGGCCTTCAGACAGCCAGAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 306
                                                                                                                                                                                                                   166
                                                                                                                                                                                                                                                                                                                                                            206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                       δ
                                                                                                    g
                                                                                                                                            8 &
                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                               d
                                                                                                                                                                                                                                                                          유
유
                                                                                                                                                                                                                                                                                                                                                        8 G
                                                                                                                                                                                                                                                                                                                                                                                                                      õ
```

```
GluthrProLeuSerProProCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArg
                                                                                                                                      ThralaGlnArgSerLeuLeuSerProLeuHisArgSerGlySerValGluAspAsnTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCAGCAGCTGGTATTTTGCCACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AlaArgProSerAspSerGlnSerLysArgLeuHisSerValArgThrSerSerSerGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ThrSerSerTrpTyrPheAlaThrGluSerSerHisPheTyrSerAlaSerAlaIleTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GluSerIleMetSerGluAsnArgSerArgGluGluLeuGlyLyeValGlySerGlnSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LeuHisLeuGluLygProAsnGluProValProAlaValSerGluGlyGlyGlyGlnLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SerPheSerGlySerMetGluIleIleGluValSer 517
                                                                                                                                                                                                                                                                                                                                                                                           306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                486
                                                                                                                  1588
                                                                                                                                                                                                                                                                                                                   1828
                                                                                                                                                                                                                                                                                                                                                                    1888
                                                                                                                                                                                                                                                                                                                                                                                                                    1948
                                                                                                                                                                                                                                                                                                                                                                                                                                             326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                206
                                         166
                                                                  1528
                                                                                          186
                                                                                                                                                                                                                                                                                                                                           286
                                                                                                                                                                                                                                 8686
                                                                                                                                                                                                                                                                                                                                     6 6 6 6 6 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                            8 8 8
                                8
                                                         ብ ራ
                                                                                                          8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SerPheCysGluLysIleLeuProTrpLeuAspLysSerValAspPheIleGluLysAla 85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1408 GTGAAAGAAAAAAGACCTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGAC 1467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 988 GGCCTCTGTGAAGGAAATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCT 1047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VallysGluLysArgProThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAsp 145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            125
                                                                                                                                                                                                                                                                                                                                                                                                                                928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          146 TyrGluLysLyslleLysAsnGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeu 165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29
                                                                                                                                                                                                                                                                                                                                                                                                                                                          29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29
                                                                                                                                                                                                                                                                                                                                                                                                       IleAlaIleAlaTyrIleMetLysArgMetAspMetSerLeuAspGluAlaTyrArgPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LysAlaSerAsnGlyCysValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTTGCCAACATTGGGCCAACCCGAATTCTTCCCCAATCTTTATCTTGGCTGCCAGCGAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ThrCysProLysProAspPhelleProGluSerHisPheleuArgValProValAsnAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         or PALM
                                                                                                                               See File Wrapper
                                                                                                                                                                                                                                                                                          Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                US-09-964-277-21 (1-517) x US-10-377-072-25 (1-3544)
PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR FILING DATE: 2000-04-26
PRIOR PILING DATE: 2000-04-26
PRIOR PRILING DATE: 2001-05-21
PRIOR FILING DATE: 2001-05-19
PRIOR PILING DATE: 2000-05-19
PRIOR PILING DATE: 2000-05-19
PRIOR PILING DATE: 2000-03-23
PRIOR PILING DATE: 2001-03-23
PRIOR FILING DATE: 2001-03-23
PRIOR FILING DATE: 2001-03-23
PRIOR FILING DATE: 2001-03-23
PRIOR FILING DATE: 2001-03-22
PRIOR FILING DATE: 2001-03-22
PRIOR FILING DATE: 2001-03-22
PRIOR FILING DATE: 2001-03-22
PRIOR PILING DATE: 2001-03-22
PRIOR DATE: 2001-03-22
PRIOR PILING DATE: 2001-03-23
                                                                                                                                                                                                                                                                                                                                                          Gaps:
                                                                                                                                                                                                                                                                                       1.02e-250
2606.00
90.21%
90.21%
97.68%
                                                                                                                                                                                                                FEATURE:
NAME/KEY: CDS
LOCATION: (589)...(2586)
US-10-377-072-25
                                                                                                                                                                                          TYPE: DNA
ORGANISM: Homo Sapiens
                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             126
                                                                                                                                                                                                                                                                                                                                                                                                        ٦
                                                                                                                                                                                                                                                                                                                                                                                                                                  869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98
                                                                                                                                                                                                                                                                                                                                                                                                                                                          21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29
                                                                                                                                                                                                                                                                                             No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                유
중
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 6 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         क वि
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
```

205

1810

1870

245

1930

285

305

265

```
ThralaGlnArgSerLeuLeuSerProLeuHisArgSerGlySerValGluAspAsnTyr 365
                                            ACTACTCTGGATGGGACCAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAG 2050
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CATGAAGAGACCCCTTTGAAAAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGA 2590
                                                                                                          CTGCACCTGGAGAAGCCAAATGAACCTGTCCCTGCTCTCAGAGGGTGGACAGAAAAGC 1690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ThrSerSerTrpTyrPheAlaThrGluSerSerHisPheTyrSerAlaSerAla11eTyr 425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      486 GluSerIleMetSerGluAsnArgSerArgGluGluLeuGlyLysValGlySerGlnSer 505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGACTCCCGAAACCAGTCCTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2111 GCCAGGCCTTCAGACAGCCAGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGCAGGGG
                                                                                                                                     186 GluthrProLeuSerProProCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArg
                                                                                                                                                                                                  AlaAlaSerLeuHi &GlyPheSerSerSerGluAspAlaLeuGluTyrTyrLy8ProSer
                                                                                                                                                                                                                                                                                                                                                   GCAGCATCCTTACATGGCTTCTCCTCATCAGAAGATGCTTTGGAATACTACAAAACCTTCC
                                                                                                                                                                                                                                                                                                                                                                                 ThrThrLeuAspGlyThrAsnLysLeuCysGlnPheSerProValGlnGluLeuSerGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                 GlnThrProGluThrSerProAspLy8GluGluAlaSerIleProLy8Ly8LeuGlnThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AlaArgProSerAspSerGlnSerLysArgLeuHisSerValArgThrSerSerSerGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2351 ACCAGCAGCTGGTATTTTGCCACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GlyGlySerAlaSerTyrSerAlaTyrSerCysSerGlnLeuProThrCysGlyAspGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ValTyrSerValArgArgArgGlnLysProSerAspArgAlaAspSerArgArgSerTrp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTCTATTCTGTGCGGCGGCGGCAGAAGCCAAGTGACCAGAGCTGACTCGCGGCGGCGGGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HisGluGluSerProPheGluLysGlnPheLysArgArgSerCysGlnMetGluPheGly
           GTGAAAGAAAAAAGACCTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGAC
                                                                                        LeuHisLeuGluLysProAsnGluProValProAlaValSerGluGlyGlyGlyGlnLysSer
                                                                                                                                                                                       ProValHisProAlaSerValProSerValProSerValGlnProSerLeuLeuGluAsp
                                                                                                                                                                                                                                       SerProLeuValGlnAlaLeuSerGlyLeuHisLeuSerAlaAspArgLeuGluAspSer
                                                                                                                                                                                                                                                   1811 AGCCCGCTGGTACAGGCGCTCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGC
                                                                                                                                                                                                                                                                                     AsnLysLeuLysArgSerPheSerLeuAspIleLysSerValSerTyrSerAlaSerMet
VallysGluLysArgProThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAsp
                                                                                                                  1631
                                                                                                                                                                                                                1751
                                                                                                                                                                                                                                                                                                              1871
                                                                                                                                                                                                                                                                                                                                      266
                                                                                                                                                                                                                                                                                                                                                                                                             1991
                                                                                                                                                                                                                                                                                                                                                                                                                                  306
                                                                                                                                                                                                                                                                                                                                                                                                                                                           2051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2471
                                                                                                                                                                                                                                                                                                                                                             1931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           466
 126
                       1511
                                                                                            166
                                                                                                                                                                                        206
                                                                                                                                                                                                                                         226
                                                                                                                                                                                                                                                                                       246
                                                                                                                                                                                                                                                                                                                                                                                     286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             426
                 g
                                                             d
                                                                                 8
                                                                                                               g
                                                                                                                                 상염
                                                                                                                                                                                   දු පු
                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                  8 B 8
                                                                                                                                                                                                                                                                                                                                                      qq
                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                   a y
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ପ୍ର ଧ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  음 장
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8 & 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                            ઠે
                      SQUENCE 13

10S-10-425-114-26234

10S-10-425-114-26234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ThrCysProLysProAspPheIleProGluSerHisPheLeuArgValProValAsnAsp 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1151 GTTGCCAACATTGGGCCAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGAT 1210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGCITITIGIGAGAAATITITGCCGIGGITGGACAAATCAGIAGAITITCAITGAGAAAGCA 1390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1091 GGCCTCTGTGAAGGAAAATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCT 1150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LysAlaSerAsnGlyCysValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MetLeuProLeuSerLeuGlnThrValPheSerLeuTyrPheTrpValAsnTrpArgArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SerPheCysGluLysIleLeuProTrpLeuAspLysSerValAspPheIleGluLysAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                            3625
516
0
1
1
56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AlaSerThrLeuPheThrCysLeuGln-------
  AGCTTTTCGGGCAGCATGGAAATCATTGAGGTCTCC 2583
                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-964-277-21 (1-517) x US-10-425-114-26234 (1-3625)
                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                       ; OTHER INFORMATION: Clone ID: LIB4119-028-H6_FLI
US-10-425-114-26234
                                                                                                                                                                                                                                                                                                                                                                                                   Gaps:
                                                                                                                                                                                                                                                                                                                                      1.06e-250
2606.00
90.21%
90.21%
97.68%
                                                                                                                                                                                                                                                       TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                Percent Similarity:
                                                                                                                                                                                                                                                                                                                             Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          972
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1451
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          106
                                                                                                                                                                                                                                                                                FEATURE:
                                                                                                                                                                                                                                                                                                                                                   Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Б
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                à
```

2110

325

2170

385

405

345

2470

465

445

Д

상 원

Search completed: September 1, 2005, 14:43:35 Job time : 989 secs